EXPLORING TRANSIT RIDERSHIP USING CENSUS, ROUTING & SCHEDULING, AND STOP CHARACTERISTIC DATA

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ABSTRACT

Exploring Transit Ridership Using Census, Routing & Scheduling, and Stop Characteristic Data

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This study develops, analyzes, and applies transit-system-specific regression tree models that identify and prioritize transit system improvements through analysis and application of ridership, Census, routing and scheduling, and transit stop characteristic data. Regression trees identify and rank independent variables that split dependent variable datasets into meaningful subsets according to significant relationships with independent variable datasets, and regression tree models can be used to identify and prioritize transit system improvements. In this study, ridership datatypes are the dependent variables (i.e., boardings and alightings) and Census, routing and scheduling, and transit stop characteristic datatypes are the independent variables. Data associated with the San Luis Obispo Regional Transit Authority (RTA) is the basis of this study.

The literature review for this study identified no other studies that use regression trees to identify and/or prioritize transit system improvements. The analysis method herein can help identify and prioritize improvements to any transit system. The findings of this study may be applicable to other transit systems if assumptions can be made about the similarity of other systems to the San Luis Obispo Regional Transit Authority system.

Relationships between transit ridership and independent variables that may be effective predictors of transit ridership are evaluated in this study. Traditional independent variables used to forecast transit ridership include population and employment densities, land use types, income distributions, service frequencies, and transit stop accessibility; other independent variables that may be significant predictors of transit ridership include transit stop amenities, characteristics, and connecting and nearby infrastructure.

Ridership data needed for the analysis presented in this study can be obtained from transit agencies. Census data needed for the analysis presented in this study is available through the United States Census Bureau. Routing and scheduling data needed for the analysis presented in this study can be extracted from local transit system schedules. Transit stop characteristic data needed for the analysis presented in this study can be gathered by using a survey instrument during field-visits.

The regression tree models developed in this study show a positive relationship in the RTA system between transit ridership and population density (specifically Asian and twenty to twenty-four years old residential population densities), the number of trips serving transit stops, and transit stop characteristics (specifically the presence of a trash can). According to these findings, this study offers recommendations for improvements to RTA's transit system and marketing and planning strategies. More general conclusions that could be applicable to more transit systems could be drawn if the analysis method used in this study were performed with more and/or larger datasets (e.g., other transit agency, regional, statewide, national, and/or global datasets) comprised of more robust, accurate, and precise datatypes, and this concept is the basis for the future work recommended by this study.

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ABBREVIATIONS AND ACRONYMNS

TcTS	Transit-centric transportation system
CHAID	Chi-squared Automatic Interaction Detection
FTA:	Federal Transit Administration
NTD:	National Transit Database
TCRP:	Transit Cooperative Research Program
SLOCOG:	San Luis Obispo Council of Governments
SLORTA:	San Luis Obispo Regional Transit Authority
UZA:	Urbanized Area
PMT:	Passenger Miles Traveled
AFC:	Automatic fare collection
APC:	Automatic passenger counting
AVL:	Automatic vehicle location
GPS:	Global positioning system
GIS:	Geographic information system
CAD:	Computer aided dispatch

LIST OF TERMS

CATEGORICAL VARIABLES
Sometimes called nominal variables, categorical variables have two or more categories, and there is no intrinsic ordering to the categories (e.g., land use types).

ORDINAL VARIABLES
Similar to categorical variables, but there is a clear ordering of the variables (e.g., low, medium, and high), and the interval between categories is inconsistent.

INTERVAL VARIABLES
Similar to ordinal variables but the interval between categories is equal (e.g., 5, 10, 20, 25).

SCALE VARIABLES
Scale variable values represent ordered categories with meaningful metrics so that distance comparisons between values are appropriate. Examples of scale variables include number of boardings, number of alightings, and trips per day. This study treats both interval and continuous variables as scale variables.

GLOBAL POSITIONING SYSTEM (GPS)
A U.S.-owned utility that provides users with positioning, navigation, and timing (PNT) services. This system consists of three segments: the space segment, the control segment, and the user segment. The U.S. Air Force develops, maintains, and operates the space and control segments. (National Coordination Office for Space-Based Positioning, Navigation, 2014)

UNIVERSAL DESIGN
Design that meets the needs of all.

AMERICANS WITH DISABILITIES ACT
Civil rights law that prohibits, under certain circumstances, discrimination based on disability.

ACCESSIBILITY
The availability of a product, device, service, or environment to all.

ASSISTIVE TECHNOLOGY
Umbrella term for assistive, adaptive, and rehabilitative devices for people with Disabilities.

CHAPTER 1: INTRODUCTION

This study seeks to answer the following questions: What changes to a transit system's stop characteristics and routes and schedules are significantly related to changes in transit ridership? How can transit agencies use these relationships to prioritize improvements to their systems? Which demographics have significant relationship to transit ridership? Towards which demographics should transit agencies focus their marketing and planning efforts? To answer these questions, this study develops, interprets, and applies transit-system-specific regression tree models that can be used to identify and prioritize system improvements through analysis and application of ridership, Census, routing and scheduling, and transit stop characteristic data.

Importance and Overview of Research

Transit-centric transportation systems (TcTSs) provide many advantages: TcTSs can reduce congestion, reduce greenhouse gas emissions, improve air quality and public respiratory health, provide increased mobility to the non-driving public (including seniors, youth and people with disabilities), encourage decreased travel demand, utilize space efficiently, provide fast alternatives in congested areas, and uphold economic health. Furthermore, TcTS can encourage walking and biking to and from stops, which can add exercise, tranquility, and flavor to daily commutes. Effective TcTSs can be desirable transportation solutions—they can decrease environmental degradation, increase mobility, increase public health, and contribute to a healthy economy.

Transit is currently thriving in the United States. There are over 140,000 vehicles that serve over 48 billion passenger-miles and collect over $8.5 billion in passenger fares each year, and in the past 10 years, the transit travel has increased by more than 20%, which is more than either highway or air travel. (National Transit Database, 2014)

Identifying changes to transit systems and policies that may lead to increases in transit ridership by making transit systems more desirable and efficient is a critical research question.

Analysis Method

This study develops, interprets, and applies transit-system-specific regression trees that can be used to identify and prioritize system improvements through analysis and application of ridership, Census, routing

and scheduling, and transit stop characteristic data. Regression trees identify and rank the strongest relationships between dependent and independent variables. Advantages of regression trees over traditional statistical approaches (including linear regression models) is that regression trees can account for correlated independent variables, and they are distribution agnostic, so they don't require restrictive assumptions that are typical of more traditional statistical analysis methods. Furthermore, regression tree data mining techniques are suitable for analysis of observational data collected outside the purview of designed experiments. (Hand et al., 2001)

Dependent Variables - Ridership Data

Most transit agencies already collect substantial transit usage data, and, hence, this data is available to develop transit-ridership-estimating models. One reason transit agencies collect ridership data is that they are required to report performance data to the National Transit Database (NTD) in order to receive their share of the over $5 billion of Federal Transit Administration (FTA) funds apportioned to transit agencies in urbanized areas (UZAs) annually. It is not uncommon for transit agencies to hire on-board ride-checkers to gather ridership data, but gathering robust data through this method is time-consuming and expensive, so transit agencies have been turning to transit intelligent transportation systems (ITS) technologies for more accurate, robust, and cost-effective data gathering, storage, interpretation, and communication. Transit-specific ITS technologies that can gather ridership data include automatic fare collection (AFC), automatic passenger counting (APC), transit user smart cards, Bluetooth, automatic vehicle location (AVL), and computer aided dispatch (CAD) technologies.

In addition to the challenges of cost-effectively collecting robust and accurate ridership data, transit agencies may be wary to share ridership data they collect, but ridership data that was reported to the NTD should generally be accessible. For this reason, the ridership data analysis approach proposed herein should be applicable to several transit systems.

Independent Variables - Census, Routing and Scheduling, and Transit-Stop Characteristics

Census data is available through the U.S. Census Bureau, routing and scheduling data can be extracted from local transit system schedules, and transit stop characteristic data can be gathered by using a survey instrument during field-visits.

Identifying the appropriate scale of Census data (e.g., block, block group, tract, county, voting district, traffic analysis zone, zip code, school district, congressional district, places, etc…) can be a challenge. Extracting Census data into a format that is useful for analysis in a time-efficient manner can also be a challenge. In addition, full data from local transit system schedules can also be difficult to obtain – published schedules may provide only a partial representation, and transit agencies may be wary to provide full timetables. Gathering transit stop characteristic data through field visits may be cumbersome, but this may be the only option if the transit agency being studied does not have the desired data, or if they are not willing to share it. In the subsequent chapters of this thesis, processes to overcome data-related challenges are described, the regression tree modeling process is described, and results are discussed.

Thesis Outline

The next chapter, chapter 2, is a literature review that identifies generally accepted indicators of transit ridership, methods used to collect transit data, synergies between transit data collection and funding, and methods to use regression trees to analyze and apply transit data. Chapter 3 identifies sources for input variable datasets and describes methods used to in this study to analyze and apply the final dataset developed for this study. Chapter 4 models the number of boardings and alightings at bus stops according to characteristics of the stops identified by regression tree analysis. Chapter 5 offers recommendations to increase ridership of the RTA system and presents ideas for future work to expand on this study.

CHAPTER 2: LITERATURE REVIEW AND BACKGROUND

This chapter is a literature review that identifies generally accepted (and other) indicators of transit ridership, methods used to collect transit data, and synergies between transit data collection and funding. This review also explores application of regression tree models, the data-mining method used in this study to analyze and apply data in order to identify and prioritize transit system improvements.

Ridership Data, FTA Funding, and the NTD

This section is a summary of FTA and National Transit Database (NTD) funding requirements, as they relate to collection of ridership data. These NTD data collection requirements generate data that should be available for researchers to analyze.

National Transit Database Fixed-route Ridership Data Collection Requirements

To be eligible for FTA Funding through NTD Reporting, transit agencies must meet specific ridership data collection requirements. The following summarizes and outlines NTD fixed-route ridership data collection requirements as specified in §60 – Data Collection. (U.S. Department of Transportation Federal Transit Administration, 2009) Transit agencies should evaluate these requirements diligently and consider them carefully when selecting NTD ridership data collection methods and transit ITS investments.

- Data collected with any instrument that records data correctly is acceptable.
- Samples must be randomly selected and selection methods should be designed to identify and correct errors when they occur; recorded errors must be corrected.
- Samples must cover all service units, and no service unit shall be selected more than once in the random sample.
- All service units expected to operate must be reported; this includes all service units on the schedule and others that are expected to operate (i.e., trippers, shuttles, and other operations). Service units shall be reported as one-way trips in terms of the amount of revenue service that each is expected to generate.
- All service unit data reported must include the date and type of service. If the sampling plan is based on the PPMT option, route identification data is also required. If sampling plan is based on

service grouping, the group membership determination method of each service unit in the random sample is required.

- Data may be collected using on-board ride-checkers and/or automatic passenger counters (APCs). Ridership data collected through other methods must be obtained from direct measurement or direct observation without passenger intercept (i.e., no passenger interviews).
- When determining distances between stops, odometers readings recorded at the pick-up and/or drop-off site that are accurate to 1/10 of mile are always acceptable; no distance estimations may be taken from maps.
- Passenger miles travelled (PMT) for each fixed-route service unit may be determined using the load-based approach or the distance based approach.
- To use the load-based approach, the following data is required for each service unit:
    - Number of boardings and number of alightings
    - Distance between any pair of consecutive stops at which boardings or alightings occurred
    - Number of people onboard the vehicle between any pair of consecutive stops
    - Number of people who stayed on from the previous one-way vehicle trip
    - Number of people who remained on the vehicle at the last stop
- To use the distance-based approach, origins, destinations, and corresponding odometer readings of each transit rider in the service unit must be recorded.
- All data reported must meet the requirements of measurement accuracy in the NTD Reporting Manual.

Identifying Potentially Significant Independent Variables

This section reviews literature to identity independent variables that may be effective predictors of transit ridership.

Traditional Transit Planning Independent Variables

Traditional independent variables used to forecast transit ridership in order to plan for ridership-maximizing routing and scheduling include population and employment densities, land use types, income distributions, service frequencies, and transit stop accessibility. In addition to route and frequency planning, transit agencies have also successfully increased ridership using marketing and planning methods that include community involvement, market segmentation, and price adjustment strategies. External economic factors outside of a transit agency's direct control (e.g., local wages and GDP) have also been strongly correlated to transit ridership. The studies summarized below support these claims.

Based on data collected in urban areas of Maryland, a study of transit ridership reported that "land use type, transit accessibility, income, and density are strongly significant and robust predictors of transit ridership." (Chakraborty & Mishra, 2013)

A Transit Cooperative Research Program (TCRP) study identified service adjustments, fare and pricing adaptations, market information initiatives, planning orientation (community and customer based approaches), and service coordination, consolidation, and market segmentation as sources of increased ridership. (U.S. Department of Transportation Federal Transit Administration Transit Cooperative Research Program, 1998)

A Mineta Transportation Institute study found "extraordinarily strong correlations between transit ridership and three external factors related to economic activity [in the U.S. between 1995 and 1999]," and these are factors were hourly wage, GDP, and GDP per capita. This study also identified that transit professionals generally accept that traditional transit territories (i.e., dense corridors, urban cores, suburbs to cities configurations, and low-auto ownership areas) are good predictors of ridership growth. (Taylor et al., 2002)

Additional Transit Planning Independent Variables

Additional independent variables that may be significant predictors of transit ridership are transit stop amenities, characteristics, and connecting and nearby infrastructure; if these variables are found to be

significant predictors, they may be used to prioritize ridership-maximizing improvements to the built environment. Transit agencies may also be able to increase ridership by using marketing and planning strategies that consider competing costs and benefits of different modes, including costs of travel (e.g., fuel, maintenance, insurance, payments, fees, etc…), costs of travel time (e.g., lost productivity), and benefits while traveling (e.g., effects of stress, health, productivity, etc…). The studies summarized below support these claims:

A study of the Triangle Transit Authority (TTA) in North Carolina found that a bus stop index score comprised of "bus stop environment" information (i.e., bus stop amenities and bi-directional stop pairing information) had high statistical significance. Of the stop amenities studied, bus stop signs, shelters, schedules, lighting, paved landing areas, and sidewalks were found to be significantly correlated. Sidewalk completeness and connectivity were also identified as "important elements in predicting ridership," and pedestrian signals, signs, and crosswalk pavement markings were also "associated with higher ridership." This study also identified that adjacent architectural features (i.e., building orientations and setbacks) are correlated with transit ridership. This study did not indicate discovery of significant correlations between TTA ridership and the presence of maps, real-time information displays, trash cans, or bike racks at bus stops; nor did this study identify significant correlation between transit ridership and roadway widths. This study also supports the traditional transit planning assumptions that land uses and frequency of service are strongly correlated with transit ridership. (University of North Carolina Department of City and Regional Planning, 2006)

A study of Broward County, Florida's transit system identifies the "generalised price of transit travel" (i.e., the time to reach employment) as "more important than land use variables for explaining transit patronage, at least for a bus-only transit system with a large number of transit-dependent riders." (Thompson, Brown, & Bhattacharya, 2012)

Ridership Data and Transit-specific Intelligent Transportation Systems (ITS)

Obviously, local real-world correlations are best identified by using input data that most accurately represents local real-world conditions. Local bus stop characteristic data can, rather simply, be gathered through one-time field-visits to bus stops. However, robust passenger usage data is harder to collect.

As stated previously, to meet NTD requirements, it is common for transit agencies to hire on-board ride-checkers to count passenger boardings and alightings at specified locations (i.e., transit stops). However, gathering robust data through this method is expensive, so datasets collected by on-board ride-checkers are usually relatively small, and they are typically only collected intermittently. Furthermore, this type of data collection is very susceptible to human error. As a result, transit agencies are more frequently turning to transit ITS for more accurate, robust, and cost-effective data gathering, storage, interpretation, and communication. This section of the literature review explores the following transit ITS technologies: automatic fare collection (AFC), automatic passenger counting (APC), transit user smart cards, automatic vehicle location (AVL), Bluetooth for passenger-tracking, and computer aided dispatch (CAD).

Automatic Fare Collection (AFC)

The main purpose of automatic fare collection (AFC) devices is to collect revenue, and they can also be used to count boardings, but, unfortunately, they do not collect alighting data. AFCs can also collect data about payment method (e.g., cash fare paid or type of pass used).

Automatic Passenger Counting (APC)

Automatic passenger counting (APC) systems can count both boardings and alightings. Automatic passenger counters (APCs) can also be used to report annual ridership data to the National Transit Database (NTD). APC data can also be very useful for local planning. Video surveillance systems can be used to validate the accuracy and precision of data collected using APCs. (Kimpel, Strathman, Griffin, Callas, & Gerhart, 2002)

More robust transit user data can be gathered when APCs are used in combination with "smart cards" that can track long-term registration, transaction, and travel behaviors of transit users. For example, a study of Chicago Transit Authority smart card holders presents an analysis of access and usage patterns and discusses other analyses that are made possible by using smart card registration and transaction data. The study also discusses difficulties that may be encountered when conducting such analyses and recommends methods to improve and expand smart card data sets. (Utsunomiya, Attanucci, & Wilson, 2006) Smart cards also come with privacy and legal issues related to encryption, storage, and dissemination of data. (Pelletier, Trépanier, & Morency, 2011)

Smart Cards

Current smart card system technologies include (Pelletier et al., 2011):

- Readers and credentials, including both contactless credentials and credentials that require contact
- In-card memory and a microprocessors
- Data encryption or non-encryption
- Usage (i.e., boardings and alightings) data collection and storage technology
- Ability to collect and store card-holder travel behavior and registration, transaction, financial, and personal data

Bluetooth

Bluetooth is an emerging transit ITS technology (Moshe, Hadas, & Levi, 2014), and it could allow transit users to employ their mobile devices in ways similar to smart cards.

Automatic Vehicle Location (AVL)

Automatic Vehicle Location (AVL) systems can track, log, and report real-time locations of transit vehicles. AVL systems are usually integrated with communications systems—they can track and communicate transit vehicle locations and schedule adherence information, which can be communicated amongst drivers, dispatchers, transit users, and transit agency staff. When AVL systems are used effectively, transit users receive real-time information, and they view their transit systems as more modern and reliable. (U.S. Department of Transportation Federal Transit Administration Transit Cooperative Research Program, 2008)

Early AVL systems used radio and wheel odometer technologies to determine and report bus locations. (U.S. Department of Transportation Federal Transit Administration Transit Cooperative Research Program, 1997) Modern AVL systems use Global Positioning System (GPS) technology.

Computer Aided Dispatch (CAD)

Computer aided dispatch (CAD) systems can collect and store data from each of the abovementioned transit ITS methods. Furthermore, by integrating, interpreting, and strategically communicating this data to transit agency staff and transit users, the data can be used to inform decisions. (U.S. Department of Transportation Federal Transit Administration Transit Cooperative Research Program, 2008)

When used in fixed-route operations, CAD software can transmit AFC data, APC data, and AVL data, on-board emergency notifications, and other information—CAD software can generally improve situational awareness. CAD software can also improve the accuracy of information communicated to transit riders by transmitting schedule adherence information, ensuring the correctness of head-signs, and announcing upcoming stops. (U.S. Department of Transportation Federal Transit Administration Transit Cooperative Research Program, 2008)

Additional Independent Variables – Transit Stop Characteristics

Generally, transit stop designs and improvements focus on accessibility and/or universal design, and, in this study, both will be tested for correlations with transit ridership originating and terminating at the stop. Universal design measures focus on meeting the wants and needs of all users, and accessibility focuses on making the stop accessible for all users, including those with physical disabilities.

Universal Design

Most scholarly literature that discusses transit system improvements also discusses some aspects of universal design. Universal design is a design philosophy focused on social inclusion that was stimulated by disability civil rights legislation, an aging population, the information revolution, and evolving markets. Universal design focuses on improving accessible routes, improving assistive technology, and improving quality-of-life for people of all ages and abilities. (Audirac, 2008)

Accessibility & ADA Requirements

In the U.S., transit accessibility usually focuses on minimum transit-specific requirements of the Americans with Disabilities Act (ADA); accordingly, Easter Seals Project ACTION created the Toolkit for the Assessment of Bus Stop Accessibility and Safety as a guide primarily for "staff at transit agencies and public works departments who are responsible for bus stop design and placement." The Toolkit interprets the Americans with Disabilities Act to develop minimum ADA requirements for bus stops. The Toolkit identifies the following as minimum ADA requirements for bus stops (Easter Seals Project ACTION, 2006):

> *Providing accessible bus stops requires choosing appropriate locations or improving the existing location. Coordination and cooperation with public works agencies, municipal government and*

business owners can enhance the connectivity between the land use and the bus stop. To ensure optimum bus stop placement, coordination should occur during the planning/development phase." Bus stop sites must have the following:

- *A firm, stable surface;*
- *A minimum clear length of 96 inches, measured from the curb or vehicle roadway edge, and a minimum clear width of 60 inches, measured parallel to the vehicle roadway;*
- *A maximum slope of 1:50 (2%) for water drainage; and*
- *Connection to streets, sidewalks or pedestrian paths by an accessible route*

Using Regression Trees to Identify and Prioritize Transit Improvements

Regression trees split datasets into subsets that represent meaningful differences in dependent variable values that correspond to significant differences in independent variable values, and regression trees rank independent variables according to the strength of their contribution to the dependent variable data splits. (Pande, 2005) Regression trees are relatively easy to program, and they produce results that are easy to understand. Also, because they are non-parametric, regression trees do not require independent variables being tested for strength of contribution to the dependent variable data splits to follow any particular probability distribution, and the independent variables being tested can have overlapping significance. (Tuffery, 2011)

Regression trees also have disadvantages. For example, because they evaluate the independent variables sequentially (not simultaneously) they detect only local (not global) optima, and the choice to divide a node into more branches is never revised subsequently—this gives greater importance to independent variables assigned nearer to the top of the tree, and it can give preference to variables that have more categories. (Tuffery, 2011) Several of these disadvantages can be overcome by using large datasets and robust validation methods. Dependent and independent variables analyzed using regression trees can be nominal, ordinal, or scale. (IBM, n.d.)

Literature Review Conclusion

Regression trees can identify and rank independent variables with significant relationships to transit-ridership dependent variables, and independent variables with significant relationships to transit-ridership dependent variables contained within regression trees can be used to identify and prioritize transit system improvements.

This literature review identified many transit datatypes and sources that can be used to develop regression trees that can, in turn, be used to identify and prioritize transit system improvements, but no studies were discovered that used regression trees to identify and prioritize transit system improvements according to expected increases in transit ridership.

This study develops regression trees that can be used to identify and prioritize transit system improvements using the datatypes identified in the literature review. The findings of this study may be applicable to any transit agency, but may be especially applicable to transit agencies that are similar to the San Luis Obispo Regional Transit Authority (e.g., a regional commuter transit system in a somewhat rural area with a temperate climate). The analysis method that this study develops is expected to be useful for any transit agency seeking a method to identify and prioritize improvements to their system. The next chapter describes the methods used by this study to gather and analyze the requisite dependent and independent variables for analysis.

CHAPTER 3: DATA COLLECTION, AGGREGATION, AND ANALYSIS METHODOLOGY

This chapter describes the collection and assembly of datatypes used in this study, including Census data and transit ridership, routing and scheduling, and stop characteristic data. Input variable dataset sources, and methods used to aggregate and analyze this study's dataset, are described in this chapter.

Identifying Input Variables Datasets

This section describes methods used by this study to identify dependent and independent variables to be analyzed.

Dependent Variables: Boardings and Alightings by Transit Stop

This study uses RTA ridership data collected in 2010 and 2011 as a basis, and this ridership data is discussed in greater detail below.

One source of ridership data used in this study is ridership data collected by RTA staff in mid-April 2010; this data includes counts of weekday boardings and alightings at every stop served by at least one of the five main RTA fixed-routes (i.e., RTA 9, 10, 12/14, and 15). The "Prioritizing RTA Fixed-route Bus Stop Improvements" report in APPENDIX A includes more detailed descriptions of this data and associated collection methods.

The other source of ridership data used in this study is the draft report titled "Prioritizing RTA and Paso Express Fixed-route Bus Stop Improvements" in APPENDIX B. This report uses the abovementioned ridership data and additional ridership data collected by Nelson\Nygaard as part of the 2012 San Luis Obispo Council of Governments (SLOCOG) North County Transit Plan. This data was collected through on-board surveys on Tuesday, May 3 and Wednesday, May 4, 2011 at every stop served by one of the five main RTA fixed-routes. The ridership data presented in the "Prioritizing RTA and Paso Express Fixed-route Bus Stop Improvements" in APPENDIX B is used as a basis of this study.

Independent Variable Datasets

This section describes the methods used by this study to identify independent variables that are included in the boardings and alightings regression tree models.

Transit Demand Forecasters (i.e., Census Data)

Robust data for numerous population and economic characteristics is available at state, county, county subdivision, city, place, and Census tract, block, and block group levels (to name a few) from the Census. (United States Census Bureau, 2014c) For reasons that will be discussed in the following sections, this study uses Census tract level data and assigns it fully to each transit stop within the tract.

Transit Demand Obstructers and Inducers (Policy-based Variables)

Within existing contexts, transit demand can either be obstructed or induced according to the actions of transit entities, transit entity partners, and others; these obstructers and inducers form a set of independent variables that are generally within transit agency control.

Routing and Scheduling

Routing and scheduling data can be extrapolated from transit timetables and maps. This analysis extrapolated RTA routing and scheduling data from the most current versions of the printed RTA fixed-route schedules at the time of this writing and from RTA schedule and route information used to populate Google Transit using a software called Urbineris. The most current versions of all the RTA fixed-route schedules included in this study are in Appendix C. The timetables RTA used to populate Google Transit at the time of this writing using the Urbineris software are included in Appendix D (some calculations used for analysis in this study are also included).

Transit Stop Characteristics

To identify local characteristics of San Luis Obispo Regional Transit Authority (RTA) bus stops, in 2013 and 2014, every bus stop served by an RTA fixed-route was visited to collect bus stop characteristic data. The data was collected by filling out a form developed in collaboration with RTA after reviewing existing professionally accepted bus stop improvement surveys. (Easter Seals Project ACTION, 2006) (Nabors, Schneider, Leven, Lieberman, & Mitchell, 2008)

The data collected with this instrument was used to create the Prioritizing RTA Fixed-route Bus Stop Improvements report, and on March 5th, 2014, the RTA Board of Directors (comprised of greater San Luis Obispo area City Mayors and County Supervisors) voted unanimously to direct staff to submit the Prioritizing RTA Fixed-route Bus Stop Improvements report to local jurisdictions and use it to guide bus stop improvements. The report seeks to prioritize RTA fixed-route bus stop improvements so that, to the

extent possible, "every stop served by an RTA fixed-route becomes ADA accessible, safe, convenient, and comfortable for citizens and visitors of all ages and abilities, including those who use mobility devices like wheelchairs, scooters, rolling luggage, and strollers." The version of the report that was approved by the RTA board is APPENDIX A.

On June 1st, 2014, RTA absorbed Atascadero Transit and Paso Express, and RTA now operates additional routes and serves additional stops, so an updated report was in order. The most current draft of the Prioritizing RTA and Paso Express Fixed-route Bus Stop Improvements report is APPENDIX B. As the data included in this report best represents current transit stop conditions, the transit stop characteristic data it contains is used as a basis of this study.

Dataset Development Details

This section describes how the dataset that is the basis of this study was built by using ridership, Census, routing and scheduling, and bus stop characteristic data associated with RTA and the RTA service area.

Ridership Data

This section presents the ridership data that will be used in this study as the dependent variables.

Data Adjustments: Moving, Consolidating, or Omitting Stops

RTA does not currently serve the same stops as those for which ridership data was collected in 2010 and 2011, and, as a result, this study makes judgments to make best and appropriate use of available data. At the time of this writing, 149 stops are served by the five main RTA fixed-routes (i.e., RTA 9, 10, 12/14, and 15). As RTA has streamlined routes and discontinued service to out-of-the-way and/or low performing stops since the ridership data that is the basis of this study was collected, this study consolidates around thirty-five stops for which ridership data was collected into sixteen stops that are currently served. This study also omits ridership data associated with twenty stops that could not be reasonably consolidated into currently operating stops. Eight stops for which ridership data was not collected are also omitted. These adjustments are not expected to have a significant effect on the outcome of this study for the reasons discussed in the following paragraphs, and the following rules were used by this study when making data adjustment judgments:

Since the ridership data that is a basis for this study was collected, some bus stops have been closed, some new stops have been opened, and some stops have been moved. Where stops have been moved to a nearby location, this study assigns ridership data to the new stop location. Where stops have been closed, if the stop is reasonably close to another operating stop that is reasonably accessible from the closed stop, ridership data has been attributed to the nearest operating stop.

Ridership data from stops that could not be reasonably attributed to another operating stop has been not been attributed to any stops included in this study, and because the statistical analyses in this study depends primarily on the differences between ridership at stops that are included in the analysis, ridership data from closed stops that is not attributed to currently operating stops should not have a significant effect on the outcome of this study. This approach was selected because this study assumes that the majority of RTA users who previously used RTA stops that are now closed still ride RTA and use other stops if they are reasonably close and easy and comfortable to access. This study also assumes that bus stop characteristics (i.e., amenities, design, and nearby and connecting infrastructure) of operational bus stops are generally at least as desirable to most transit users as characteristics of closed bus stops.

The following sections highlight distinct adjustments made to the ridership data used in this study.

Currently Operating Bus Stops with no Ridership Data

Currently operating stops that do not have associated ridership data have been omitted from this analysis. These stops do not have associated ridership data because they were not included in the ridership surveys that produced the data that is a basis of this study. The stops without ridership data that have been omitted from this study are:

- Santa Rosa at Murray NB
- Grand at McCollum NB & SB
- Grand at Wilson NB
- Grand at Abbott SB
- 1st at Oak
- Theatre at Gahan SB
- Theatre Drive at Rancho Paso
- Burton at Burton Cir.

Moved, Consolidated, and Omitted Bus Stops since last Ridership Surveys

The table below shows adjustments made by this study to account for service changes since the last RTA ridership surveys were conducted:

Table 1: Moved, Consolidated, and Omitted Bus Stops since last Ridership Surveys

Rte.	Moved and/or Consolidated Stops	Omitted Stops
RTA 9	Spring at 6th SB → Spring at 4th SB Las Tablas at Posada NB & SB → Twin Cities Hospital ECR at Santa Cruz SB → ECR at Atalaya SB Paloma Park NB & SB → Viejo Camino at Bocina NB & SB	Creston at Melody SB Main at 1st NB & SB Main at 6th NB & SB
RTA 10	NORTHBOUND Higuera at Prado, Higuera at Chumash → Higuera at Margarita NB Higuera at Hind → Higuera at Suburban NB South at Beebee, South at High, Higuera at Elks Lane, South at Meadow, South at King, South at Exposition → Higuera at South NB Santa Rosa at Higuera → Marsh at Broad NB SOUTHBOUND South at Beebee, South at Broad, Higuera at Bridge, South at Exposition, South at King → Higuera at South SB Higuera at Prado, Higuera at Granada → Higuera at Margarita SB Higuera at Hind, Higuera at Silver City → Higuera at Suburban	Greyhound NB & SB *(near other stops, but this study assumes Greyhound bus service was generating overwhelming majority of trips to and from this stop)* E. Main St. at College Dr. NB Santa Barbara at High Santa Barbara at Church
RTA 12	All Cuesta College stops → Cuesta College (except for the Achievement House stop which remains in operation and is still counted as a unique stop) Highland at Hwy 1 → Santa Rosa at Foothill SB Men's Colony NB & SB → Men's Colony at HWY 1 NB *(The Men's Colony used to be served in both directions; now it is only served on NB trips*) Kansas at HWY 1 NB & SB → Kansas at HWY 1 SB *(Kansas at HWY 1 used to be served in both directions; now it is only served on SB trips)*	Patricia at Foothill NB & SB LOVR at Buckskin NB & SB
RTA 15	Ocean @ Cayucos → Cayucos @ Ash	Main @ Errol NB & SB Main @ Elena Main @ Bonita Main @ Jamaica Main at San Joaquin

Transit Demand Forecasters

This sections presents data that will be evaluated as independent variables in this study to determine if they are effective indicators of transit ridership within the RTA system.

Census Data

The Census makes available robust data that can be used for transit planning (United States Census Bureau, 2014c), and Census data that is applicable to this study is discussed below.

Census Tract Level Data

Population, ethnicity, race, age, and household count data from the 2010 Census down to the Census tract level can be easily accessed using the 2010 Census Interactive Population Map. (United States Census Bureau, 2014a) Median household income, worker population, commute time, and automobile ownership data collected through the 2012 American Community Survey down to the Census tract level can be easily accessed using Census Explorer "Commuting Edition" and "People, Education, and Income." (United States Census Bureau, 2014b) This data is a basis of this study.

Census Block Level Data

Population, ethnicity, race, age, and household count data from the 2010 Census down to the Census block level can also be easily accessed using the 2010 Census Interactive Population Map (United States Census Bureau, 2014a), but, because Census blocks are often small and can be oddly-shaped, analysis that focuses on individual Census block data associated with the bus stop(s) that lie(s) within the Census block may be thrown-off because it is too granular. So, for the purposes of this study, data down to the Census tract level appears appropriate and will be used in the analysis conducted in this study.

Point Data

Census employment data is available down to the location of the employer, and it can be accessed using the OnTheMap tool available on the Longitudinal Employer-Household Dynamics (LEHD) website. (United States Census Bureau, 2015a) For the reasons mentioned above in the Census block level data section, this study will use this data at the Census tract level. Because it is the most recent data available, employment data used in this study comes from 2011 LEHD Origin Destination Employment Statistics (LODES). (United States Census Bureau, 2015a)

Density Conversions

Density is generally accepted as an important indicator of transit demand and ridership; so, in this study, when testing for independent variables with statistically significant relationship to stop-level transit ridership, Census tract data is converted into densities. For example, rather than testing the number of renter-occupied units per Census tract, this study will test the average number of renter-occupied units per square mile of the Census tract. To convert raw Census data into densities, this study uses land areas of Census tracts that were obtained by using geographic information system (GIS) 2014 Census tract shapefile data that is available through the TIGER/Line website. (United States Census Bureau, 2015b)

Equation 1: Census Tract Count Variable Density

$$Census\ Tract\ Count\ Variable\ Density = \frac{Census\ Tract\ Count\ Variable}{Census\ Tract\ Area}$$

Capping Land Areas

Overwhelmingly, RTA routes travel from/to residential/employment center from/to residential/employment center, but, largely because San Luis Obispo County is home to vast agricultural and open space lands, a few Census tracts analyzed in this study have land-areas that skew the desired results of this study, and, for this reason, maximum upper limits for Census tract land areas are set in this study. Of the tracts where RTA bus stops are located, the table below shows the four the largest land areas.

Table 2: Largest Tracts with RTA Bus Stops

Tract Number	Area [Square Miles]	Locations of RTA Bus Stops
127.02	1111	Santa Margarita and Atascadero
103	650	San Miguel
123.02	365	Nipomo
127.04	45	Templeton and Paso Robles

The next largest Census tract is 101.02; it includes part of Paso Robles, and it is seventeen square miles. So that the analysis is not skewed by including geographically large but sparsely populated land areas outside RTA's service area, in this study, any tract land area that exceeds twenty square miles will be set equal to twenty square miles. This only affects four census tracts out of the thirty-six census tracts that contain a bus stop served by at least one of the main RTA fixed-routes.

Capping Residential Density in the California Men's Colony Census Tract

Because the CA Men's Colony has the greatest residential density, and its residents have little to no access to RTA service, all residential densities datatypes for the CA Men's Colony greater than 34.7 residents per square-mile have been set equal to 34.7 residents per square-mile, which is equal to the renter occupied population density [renters per square-mile] of the Census tract.

Transit Demand Inducers and Obstructers

This sections presents data that will be evaluated as independent variables in this study to determine if they are effective indicators transit demand stimulation or obstruction within the RTA system.

Routing and Scheduling Input Data

Routing and scheduling input data has been gathered from maps, straight-line diagrams, and timetables in the published RTA schedules that are in effect at the time of this writing; these schedules are in APPENDIX C. Data that is intended to match the published schedules sent to Google Transit using Urbineris software is used in this study, and these spreadsheets are included in APPENDIX D.

RTA Weekday Service Schedule

Down to the bus stops served, all RTA fixed-routes operate on the same schedule every weekday, and this study evaluates the number of bus trips per day serving the stop

Bidirectional Stops and Paired Stops

Stops served by a route, or routes, in both directions are considered bidirectional (e.g., served by both NB and SB or Clockwise and Counterclockwise). Corresponding stops served by routes in both directions within reasonable walking distance of one another, and that are reasonably accessible from one another, are considered to be part of a stop pair. Stop pairs are not limited to two stops; for example, two closely spaced stops on one side of the road can both be paired with a single stop on the other side of the road if they are both accessible from, and within reasonable walking distance to, the stop on the other side of the road. If a stop is considered bidirectional, it is also considered a paired stop.

Transit Stop Characteristic Data

Bus stop characteristic data used in this study was gathered through field-visits to every bus stop served by the RTA fixed-route system. Data regarding many characteristics of RTA bus stops was collected, and

information about all of the data collected can be found in the RTA and Paso Express fixed-route improvement prioritization reports in APPENDIX A and APPENDIX B. This study evaluates the presence (or not) of ADA-compliant landing pads, the number of benches, shelter area, presence of a shelter, presence of a bike rack, presence of a trash can, the number of trash cans, presence of a recycling receptacle, and the percent of routes that serve a stop that are indicated as serving the stop at the stop as independent variables with potential relationship to transit ridership dependent variables. The minimum and maximum values of these independent variables within the RTA system are summarized in tables in the following sections, and counts and percentages of stops with these stop amenities are discussed in greater detail in the RTA and Paso Express fixed-route improvement prioritization reports in APPENDIX A and APPENDIX B

Capping Twin Cities Hospital Shelter Area

Since the area of the shelter at Twin Cities Hospital is an outlier because it is a covered walkway that connects to the hospital, this study will set the area of the shelter at twin cities hospital equal to the area of the next largest shelter; which is 552 square-feet—the combined area of the two shelters at Atascadero Transit Center.

Final Dataset Spreadsheet

The final dataset spreadsheet that is used as the basis of this analysis is in Appendix E. This spreadsheet includes ridership, Census, routing and scheduling, and bus stop characteristics data corresponding to each bus stop currently served by the main RTA fixed-routes, and the variables included in this spreadsheet are summarized in the following sections:

Dependent Variables

The dependent variables that will be tested in this study are the number of weekly boardings at each bus stop and the number of weekly alightings at each bus stop, and the table below shows how these variables are labeled during analysis.

Table 3: Transit Ridership Dependent Variables

Variable	SPPS Variable Name
Number of weekly boardings at bus stop	Ons
Number of weekly alightings at bus stop	Offs

Independent Variables

Census, routing and scheduling, and transit stop characteristic data will be analyzed in this study as independent variables, and the independent variables that will be tested in this study can be divided into four broad datatypes:

- Resident-based
- Employment-based
- Routing- and scheduling-based
- Transit-stop-characteristic-based

The tables in the sections below show how these variables will be labeled during analyses.

Resident-based Independent Variables

The resident-based independent variables that will be tested for statistically significant relationships with the dependent ridership variables are summarized in the table below. All Census data in this study is presented on the Census tract scale.

Table 4: Resident-based Census Tract Density Independent Variables

Density Category	Density Variable	SPSS Density Variable Name	Minimum Value [per mile^2]	Maximum Value [per mile^2]
Total population	Total residential population	ResPop	34.7 residents	7248.5 residents
Gender cohort	Male residential population	ResMale	34.7 residents	3668.2 residents
	Female residential population	ResFemale	1.9 residents	3580.3 residents
Age cohort	18 and under	Res<18	0 residents	2163.5 residents
	Over 18	Res>18	34.7 residents	5315.8 residents
	20 – 24	Res20to24	6.3 residents	1938.1 residents
	25 – 34	Res25to34	10.9 residents	1360.6 residents
	35 – 49	Res35to49	7.8 residents	1304.5 residents
	50 – 64	Res50to64	4.1 residents	1300.1 residents
	65 and over	Res>65	2.3 residents	683.0 residents
Home ownership and rental cohort	Occupied housing unit	OccUnits	11.6 units	3032.6 units
	Owner-occupied housing unit	OwnOccUnits	0 units	1267.7 units
	Owner-occupied population	OwnOccPop	0 residents	3079.2 residents
	Renter-occupied housing unit	RentOccUnits	4.0 units	2609.2 units
	Renter-occupied population	RentOccPop	8.6 residents	5100.0 residents
	Housing with minors	HousingWith Minors	0 units	954.5 units
Race/ethnicity cohort	Hispanic or Latino density	ResLatino	17.5 residents	4523.6 residents
	White	ResWhite	34.7 residents	4987.2 residents
	African American	ResBlack	0.5 residents	198.4 residents
	Asian	ResAsian	0.7 residents	262.2 residents
	American Indian or Alaska Native (AIAN)	ResAIAN	0.5 residents	140.4 residents
	Native Hawaiian or Other Pacific Islander (NHPI)	ResNHPI	0.1 residents	15.0 residents
	Some other race	ResOtherRace	5.3 residents	1506.6 residents
	Two or more races	ResTwoOr MoreRaces	1.9 residents	479.1 residents
Other resident-based cohort data	Over 16 years of age (worker)	ResWorkers	0 residents	4021.6 residents
	Worker without personal vehicle	ResWorkers_ NoAuto	0 residents	1279.8 residents

Employment-based Independent Variables

The employment-based by independent variables that will be tested for statistically significant relationships with the dependent ridership variables are summarized in the table below. All Census data in this study is presented on the Census tract scale

Table 5: Employment-based Census Tract Density Independent Variables

Density Category	Density Variable	SPSS Density Variable Name	Minimum Value [workers/mile^2]	Maximum Value [workers/mile^2]
Total jobs	Total jobs	AllJobs	18.2	14343.2
Gender cohort	Male workers	WorkMale	3.6	6678.7
	Female workers	WorkFemale	2.9	7664.5
Worker age cohort	29 and under	Work<29	1.8	4673.5
	30 to 54	Work30to54	3.2	6932.8
	55 and over	Work>55	1.5	2737.0
Worker education cohort	No high school diploma	Work<HS	0.7	1545.1
	High school diploma, but no college	WorkHSDiploma	1.3	2091.5
	Some college, but no degree	WorkSomeCollege	1.6	3200.3
	College degree	WorkCollegeDegree	1.2	2832.9
Worker monthly income cohort	Less than $1250	Work<$1250	2.4	4574.4
	$1251 to $3333	Work$1251to$3333	2.6	5483.6
	More than $3333	Work>$3333	1.5	4285.2
Worker race/ethnicity cohort	Hispanic or Latino density	WorkLatino	1.4	3797.9
	White	WorkWhite	6.0	12817.4
	African American	WorkBlack	0.1	324.3
	Asian	WorkAsian	0.2	688.6
	American Indian or Alaska Native (AIAN)	WorkAIAN	0.1	172.6
	Native Hawaiian or Other Pacific Islander (NHPI)	WorkNHPI	0.0	36.7
	Two or more races	WorkTwoOrMoreRaces	0.1	303.6

Routing and Scheduling Independent Variables

The routing- and scheduling-based independent variables that will be tested for statistically significant relationships with the dependent ridership variables are summarized in the table below.

Table 6: Routing and Scheduling Independent Variables

Category	Variable	SPSS Variable Name	Minimum Value	Maximum Value
Trips per Day	Number of bus trips per day serving the stop	BusTripsPerDay	2	116
Stop Pairing	Paired stop? (i.e., is there another stop within easy walking distance that serves another bus in the opposite direction?)	BusPairedStop	0 = no	1 = yes

Transit Stop Characteristic Independent Variables

The bus stop characteristic-based independent variables that will be tested for statistically significant relationships with the dependent ridership variables are summarized in the table below.

Table 7: Bus Stop Amenity Independent Variables

Category	Variable	SPSS Variable Name	Minimum Value	Maximum Value
ADA	Is there an accessible 5' by 8' (minimum) mobility device landing pad at the bus stop?	ADALandingPad	0 = no	1 = yes
Seating and Shelter	Number of benches at the stop	Benches	0	10
	Is there a shelter at the stop?	Shelter	0 = no	1 = yes
	Shelter area [sqft] of the stop	ShelterArea	0	4200
Bike	Bike Rack or Storage at the stop?	BikeRack	0 = no	1 = yes
Trash and Recycle	Is there a trash receptacle at the stop?	TrashCan	0 = no	1 = yes
	Number of trash receptacles at the stop	#ofTrash	0	3
	Is there a recycle receptacle at the stop?	Recycle	0 = no	1 = yes
Signage	Percent of routes serving the stop that are indicated at the stop	%routesIndicated	0%	100%

Analysis Method

This analysis will develop regression trees through a method that identifies independent variables with significant relationships to transit ridership dependent variables. The independent variables used in this study are discussed in the previous chapter, and they can be categorized as Census, routing and scheduling, and transit stop characteristic datatypes. This chapter explores, determines, and describes how this study will conduct regression tree analysis.

Statistics Terminology Used in This Study

Prior to statistical analysis, it is helpful to understand some terminology. The UCLA Institute for Digital Research and Education (IDRE) offers the following definitions of categorical (or nominal), ordinal, and interval variables. (UCLA Institute for Digital Research and Education, 2015b) Categorical variables (also called nominal variables) have two or more categories, and there is no intrinsic ordering to the categories (e.g., land use types). Ordinal variables are similar to categorical variables, but there is a clear ordering of the variables (e.g., low, medium, and high), and the interval between categories is inconsistent. Interval variables are similar to ordinal variables, but the interval between categories is equal (e.g., 5, 10, 20, 25).

Also, this study will use SPSS for statistical analysis, and IBM offers a definition of scale variables that is similar to IDRE's definition of interval variables, which is: "a variable can be treated as scale (continuous) when its values represent ordered categories with a meaningful metric, so that distance comparisons between values are appropriate. Examples of scale variables include age in years and income in thousands of dollars." (IBM, n.d.) This study will treat both interval and continuous variables as scale variables.

Estimating Regression Trees Using SPSS

In SPSS, regression trees can be "grown" using Chi-squared Automatic Interaction Detection (CHAID), exhaustive CHAID, Classification and Regression Trees (CRT), or a Quick, Unbiased, Efficient Statistical Tree (QUEST) (IBM, n.d.); to determine the appropriate regression tree method for this study, these methods are briefly described and explored below.

QUEST Growing Method

QUEST is a "method that is fast and avoids other methods' bias in favor of predictors with many categories. QUEST can be specified only if the dependent variable is nominal." (IBM, n.d.) The dependent variables analyzed in this study are transit ridership, which are not nominal, so QUEST will not be used in this study.

CRT Growing Method

CRT "splits the data into segments that are as homogeneous as possible with respect to the dependent variable. A terminal node in which all cases have the same value for the dependent variable is a homogeneous, 'pure' node." (IBM, n.d.) The dependent variables tested in this analysis are transit boardings and alightings, and because the values of the dependent variables vary widely, homogenous terminal nodes are not sought, and CRT seeks terminal nodes with homogeneous dependent variables in the terminal node, this analysis will not use the CRT growing method.

CHAID Growing Method

CHAID "chooses the independent (predictor) variable that has the strongest interaction with the dependent variable. Categories of each predictor are merged if they are not significantly different with respect to the dependent variable." (IBM, n.d.) Exhaustive CHAID is a modification of CHAID that examines all possible splits for each predictor. Due to this characteristic, exhaustive CHAID will be explored in this analysis.

Growing Regression Tress in SPSS through Exhaustive CHAID

The following is a discussion of SPSS 22 settings used in this study to grow regression trees using the Exhaustive CHAID method:

Growth Limits & Stop Criterion

Once a stop criterion is reached, regression trees stop attempting to find further significant variables along their "branches" beyond the significant variable identified in the current nodes. In SPSS 22, stop criterion can be reached two ways: 1) achieving a pre-specified maximum tree depth, and 2) not having enough cases with nodes to further split the data.

For data files with a small number of cases, the default values of 100 cases for parent nodes and 50 cases for child nodes may sometimes result in trees with no nodes below the root node; in this case,

lowering the minimum values may produce more useful results. (IBM, n.d.) Furthermore, stop criterion can be set by specifying the minimum quantity of samples within each node, and then, if the quantity in the node is less than the specified value, the regression tree stops trying to find further significant variables along that branch. The fixed value for this stop criterion is usually between 10 and 30, but, for larger sample sizes, stop criterion between 75 and 100 are more appropriate. (Tuffery, 2011) Tuffery further recommends, to avoid over fitting the sample, at least 30 to 50 cases should be in each node. (Tuffery, 2011) Because the dataset analyzed in this study is relatively small (n = 149), this study will require 40 minimum cases in the parent node and 20 minimum cases in the child nodes.

Validation

SPSS 22 has two validation options: cross-validation and split-sample validation. (IBM, n.d.) Split-sample Validation generates a model using a training sample and tests the model on a hold-out sample. Because there may not be enough cases to adequately grow the tree, small training sample sizes may yield poor models (IBM, n.d.), and because the dataset that is the basis of this analysis is relatively small, split-sample validation will not be used in this study.

"Crossvalidation divides the sample into a number of subsamples, or folds. Tree models are then generated, excluding the data from each subsample in turn. The first tree is based on all of the cases except those in the first sample fold, the second tree is based on all of the cases except those in the second sample fold, and so on. For each tree, misclassification risk is estimated by applying the tree to the subsample excluded in generating it. You can specify a maximum of 25 sample folds. The higher the value, the fewer the number of cases excluded for each tree model. Crossvalidation produces a single, final tree model. The crossvalidated risk estimate for the final tree is calculated as the average of the risks for all of the trees." (IBM, n.d.) Because the dataset is relatively small and computing power is available, this analysis will perform cross-validation with the maximum number of sample folds allowed by SPPS 22 (i.e., 25 folds) specified.

Significance Levels

For splitting nodes, the value must be greater than 0 and less than 1. Lower values tend to produce trees with fewer nodes. (IBM, n.d.) The analysis in this study will be performed using the default 0.05

significance level for splitting nodes; that is, this analysis is looking for independent variables that have a statistically significant relationship to transit usage boarding variables at a 95% confidence level.

CHAID Merging Categories

For merging categories, the value must be greater than 0 and less than or equal to 1. To prevent merging of categories, IBM suggests specifying a "Splitting Nodes" value of 1. (IBM, n.d.) This study is exploring exhaustive CHAID, not CHAID, and when performing exhaustive CHAID, because exhaustive CHAID explores all possible splits for each predictor, the merging category option is fixed.

Resplitting Merged Categories with a Node

So that data is well distributed at each stage of analysis, this study will build regression trees that allow for re-splitting of merged categories within nodes.

Intervals for Scale Independent Variables

Prior to CHAID analysis, "scale independent (predictor) variables are always banded into discrete groups (for example, 0–10, 11–20, 21–30, etc.)." The initial/maximum number of groups can be specified to be a fixed number that initially bands all scale independent variables into the same number of groups, or a custom number of groups can be specified for each scale independent variable. (IBM, n.d.) This analysis will use the default fixed-value of 10 number of groups for every scale independent variable.

This chapter identified sources for input variable datasets and described methods used to build and analyze the dataset. The next chapter performs the analysis described in this chapter using the dataset built using the methods described in this chapter. Results of analysis are also presented and discussed in the next chapter.

CHAPTER 4: ANALYSIS, RESULTS, AND DISCUSSION USING REGRESSION TREE METHOD

The analysis in this chapter models the number of boardings and alightings at bus stops according to characteristics of the stops, and the modeling tool used is regression trees. Regression tree models for boardings and alightings are first developed using only Census data associated with individual stops. Next, boarding and alighting regression tree models are developed using only stop-specific routing, scheduling, and stop characteristic data. Finally, boarding and alighting regression tree models are developed using the full dataset (i.e., Census, routing and scheduling, and stop characteristic data). Boarding regression tree models are developed and analyzed first, followed by alighting regression tree models.

The "Bidirectional" independent variable was omitted from this analysis because it was observed that many bidirectional stops were also transit hubs near city-centers, and, as such, these stops had some of the highest numbers of boardings and alightings, regardless of the other stop characteristics. Hence, the significant relationship between the "Bidirectional" variable and boardings and alightings wasn't useful in gaining understanding of what nearer-term transit system improvements may lead to higher ridership. In total, sixteen "Bidirectional" stops were omitted from analysis.

Regression Tree Models for Estimating Boardings

This section models the number of boardings at RTA bus stops according to characteristics of the stops identified by regression tree analysis. Boarding regression trees are first developed using Census data only; then developed using routing, scheduling, and stop characteristic data only; then developed using the full dataset.

Regression Tree Models for Estimating Boardings: Census Data Only

The first boardings regression tree model uses only Census data. In this regression tree, the density of the residential Asian population is the independent variable that splits the RTA boardings data first, and the density of the total population splits the RTA boardings data second.

As can be seen in the second level of the regression tree below, when there is less than or equal to 4.5 Asian residents per square-mile in the Census tract in which a bus stop is located, on average there are 5.2 boardings per week at these bus stops. When there is between 4.5 and 13.4 Asian residents per square-mile in the Census tract in which a bus stop is located, on average there are 11.8 boardings per week at

these bus stops. Bus stops with between 13.4 and 123.2 Asian residents per square-mile have an average of 29.0 boardings per week, and bus stops with more than 123.2 Asian residents per square-mile have an average of 64.2 boardings per week. One can observe that, as the Asian Population density rises, so does transit ridership.

At the next level, when the residential Asian population is between 13.4 and 123.2 residents per square-mile and there is less than or equal to 1493.9 total residents per square-mile in the Census tract in which a bus stop is located, on average there are 36.9 boardings per week at these bus stops. In the same scenario, bus stops with greater than 1493.9 total residents per square-mile have an average of 17.9 boardings per week.

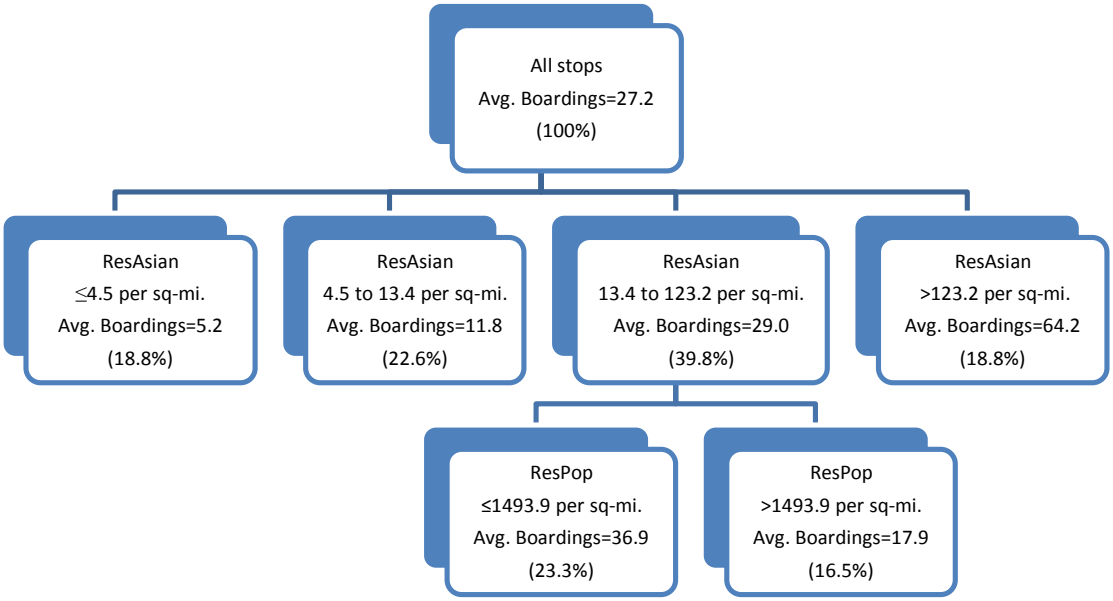

Figure 1: Ons – Census Data Only Regression Tree

Generally, transit ridership is expected to increase as population density increases, and this is exactly what happens in the regression tree above as the Asian residential population density increases. However, in the third level of the tree, as total resident population density increases, the average number of boardings decreases – this is probably due to the strength of the relationship between Asian resident population density and RTA boardings that is accounted for in the second level of the regression tree.

Regression Tree Models for Boardings: Routing, Scheduling & Stop Characteristic Data Only

The regression tree below models boardings using only routing, scheduling, and stop characteristic data. In this regression tree, the presence of a trash can is the first independent variable that splits the RTA boardings data, and the number of trips per day serving the bus stop is the second independent variable that splits the RTA boardings data.

As can be seen in the figure below, when a trash can is present at a stop, on average there are 51.4 boardings per week, and bus stops without a trash can have an average of 15.4 boardings per week.

At the next level, when there is no trash can at a bus stop and there is less than or equal to five trips per day serving a stop, on average there are 5.6 boardings per week at the bus stop. In the same scenario, bus stops with between five and fourteen trips per day serving the stop have an average of 21.4 boardings per week, and bus stops with more than fourteen trips per day serving the stop have an average of 22.8 boardings per day.

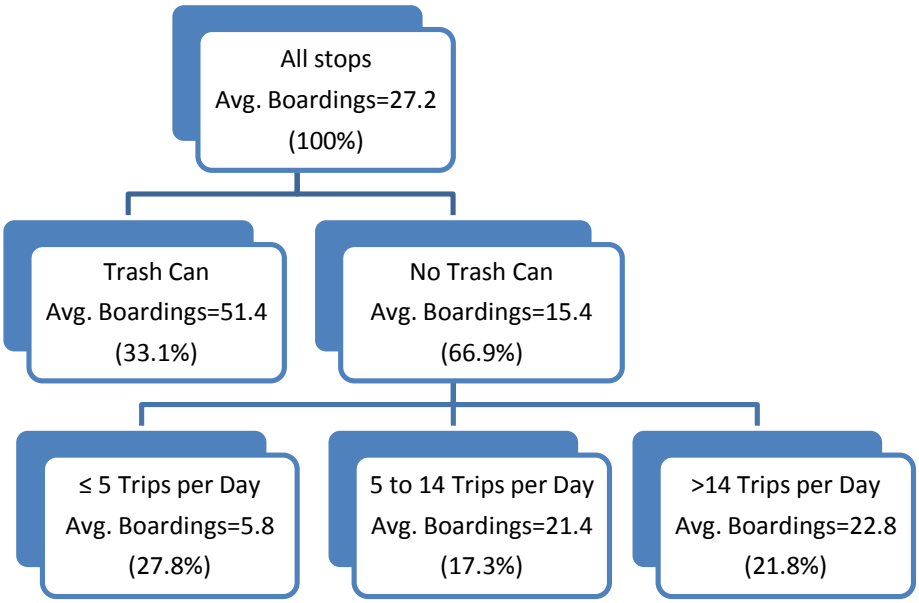

Figure 2: Ons – Routing, Scheduling & Stop Characteristic Data Only Regression Tree

Generally, transit ridership is expected to be higher at stops with trash cans because they can create a sense of place, make stops more desirable by reducing the amount of trash, and transit agency policies will place trash cans at higher-use stops before lower-use stops—the regression tree model

captures this relationship. It is also generally expected that the number of boardings increases as the number of trips serving a transit stop increase, and this is also modeled in the regression tree above.

Regression Tree Models for Estimating Boardings: Full Dataset

The regression tree below models RTA boardings using the full dataset (i.e., Census, routing and scheduling, and stop characteristic data). As expected, independent variables included in the previous two models are again included in the model below that was developed using the full dataset. In the model below, the density of the residential Asian population is the independent variable that splits the RTA boardings data first, and the presence of a trach can at a bus stop splits the RTA boardings data second. Because the density of the residential Asian population remains in the second level of the regression tree, its dataset classification boundaries and associated boardings estimates remain the same as in the previous Census-data-only tree.

Because the presence of a trash can at a bus stop has dropped to the third level of the RTA boardings regression tree model, its dataset classification boundaries and associated boardings estimates have changed. In the regression tree model below, when the residential Asian population is between 13.4 and 123.2 residents per square-mile and there is a trash can at a bus stop, the average number of weekly boardings at a stop is 39.3. In the same scenario, when there is not a trash can at a bus stop, the average number of weekly boardings is 19.8.

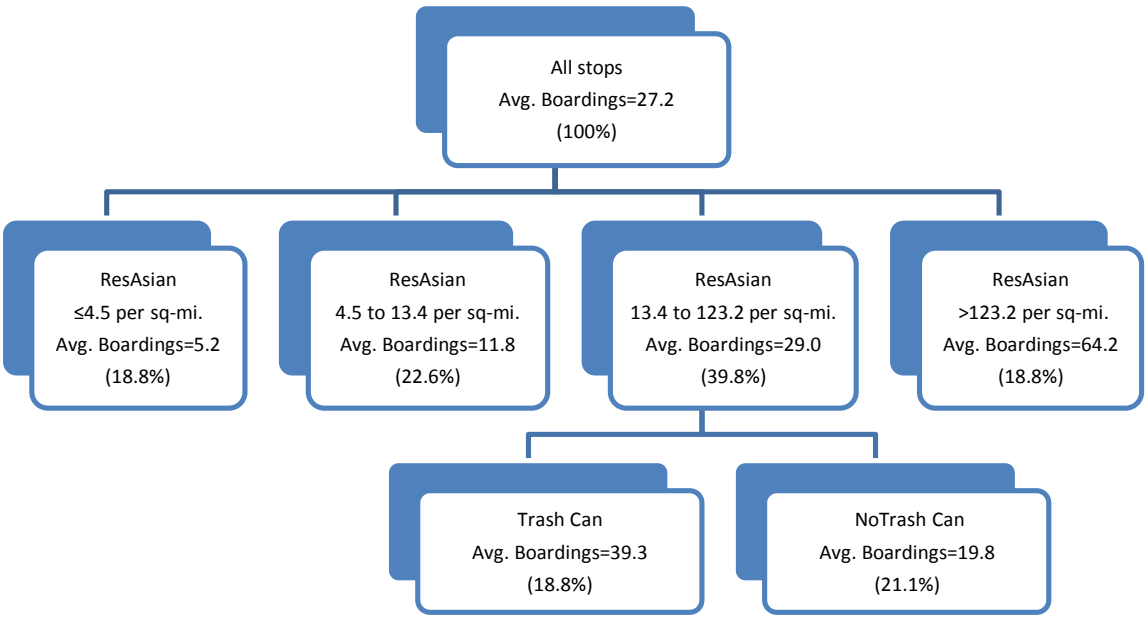

Figure 3: Ons – Full Dataset Regression Tree

Generally, transit ridership is expected to increase as population density increases, and this is exactly what happens in the regression tree above as the Asian residential population density increases. Furthermore, transit ridership is generally expected to be higher at stops with trash cans because they can create a sense of place, make stops more desirable by reducing the amount of trash, and transit agency policies will place trash cans at higher-use stops before lower-use stops, and the regression tree model above also captures this relationship.

Regression Tree Models for Estimating Alightings

This section models the number of alightings at RTA bus stops according to characteristics of the stops identified by regression tree analysis. Alighting regression trees are first developed using Census data only; then developed using routing, scheduling, and stop characteristic data only; then developed using the full dataset.

Regression Tree Models for Estimating Alightings: Census Data Only

The regression tree below models alightings using only Census data. In this regression tree, the density of residents twenty to twenty-four years old is the independent variable that splits the RTA alightings data first, and the density of the Native Hawaiian / Pacific Islander residential population splits the RTA alightings data second.

As can be seen in the second level of the regression tree, when there is less than or equal to 17.2 residents twenty to twenty-four years old per square-mile in the Census tract in which a bus stop is located, on average there are 5.2 alightings per week at these bus stops. When there is between 17.2 and 87.3 residents twenty to twenty-four years old per square-mile, on average there are 13.6 alightings per week at these bus stops. Bus stops with between 87.3 and 226.2 residents twenty to twenty-four years old per square-mile have an average of 57.3 alightings per week, and bus stops with more than 226.2 residents twenty to twenty-four years old per square-mile have an average of 65.5 alightings per week. One can observe that, as the residents twenty to twenty-four population density rises, so does transit ridership.

At the next level, when residents twenty to twenty-four years old per square-mile is between 17.2 and 87.3, the density of the Native Hawaiian / Pacific Islander residential population splits the RTA alightings data next. In this scenario, when there is less than or equal to 0.68 Native Hawaiian / Pacific

Islander residents per square-mile in the Census tract in which a bus stop is located, on average there are 22.1 alightings per week at these bus stops. In the same scenario, bus stops with greater than 0.68 Native Hawaiian / Pacific Islander residents per square-mile in the Census tract have an average of 9.2 alightings per week.

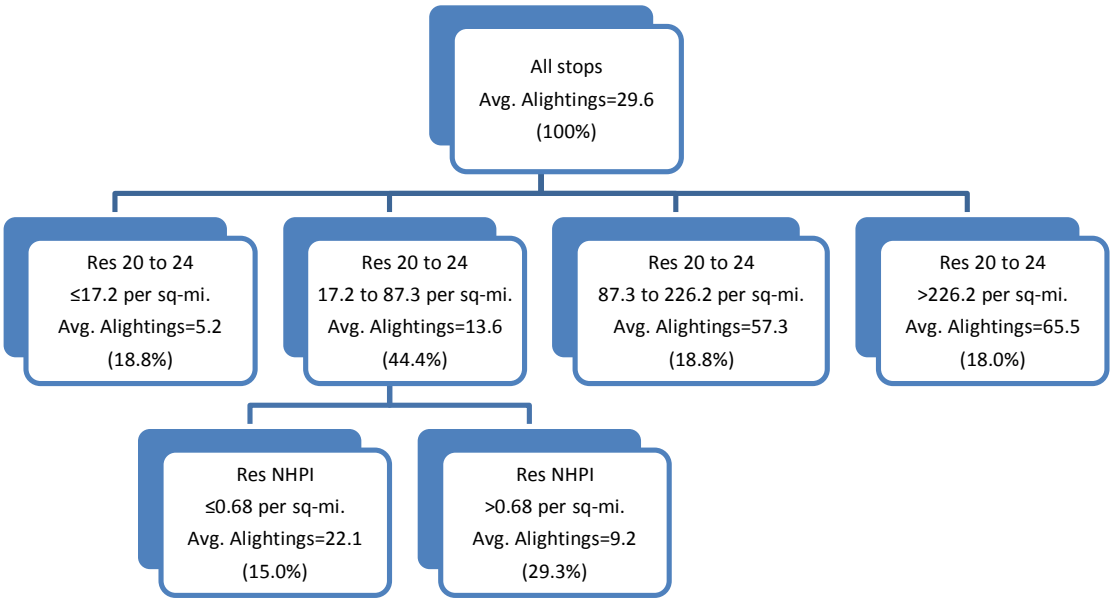

Figure 4: Offs – Census Data Only Regression Tree

Generally, transit ridership is expected to increase as population density increases, and this is exactly what happens in the regression tree below as the residents twenty to twenty-four years old population density increases. However, in the third level of the tree, as Native Hawaiian / Pacific Islander resident density increases, the average number of alightings decreases – this is probably due to the strength of the relationship between twenty to twenty-four years old population density and RTA alightings that is accounted for in the second level of the regression tree.

Regression Tree Models for Alightings: Routing, Scheduling & Stop Characteristic Data Only

The regression tree below models alightings using only routing, scheduling, and stop characteristic data. In this regression tree, the presence of a trash can is the independent variable that splits the RTA alightings data first, and the number of trips per day serving the bus stop splits the RTA alightings data second – the same routing, scheduling, and stop characteristic independent variables split the alightings data in the same order as in the earlier boardings regression tree model.

As can be seen in the second level of the regression tree, when a trash can is present at a stop, on average there are 54.3 alightings per week, and bus stops without a trash can have an average of 17.4 alightings per week.

At the next level, when there is no trash can at a bus stop, the number of trips per day serving the bus stop splits the RTA alightings data next. In this scenario, when there is less than or equal to five trips per day serving a stop, on average there are 3.9 alightings per week at the stop. In the same scenario, bus stops with more than five trips per day serving the stop have an average of 26.9 alightings per week.

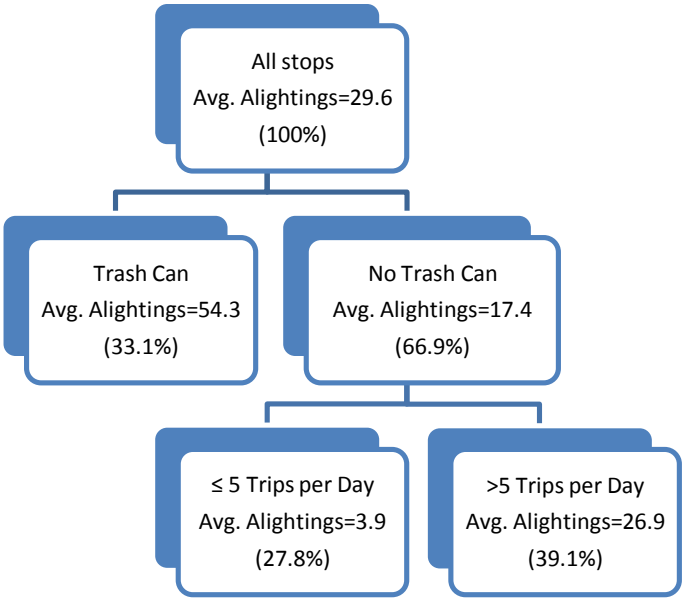

Figure 5: Offs – Routing, Scheduling & Stop Characteristic Data Only Regression Tree

Generally, transit ridership is expected to be higher at stops with trash cans because they can create a sense of place, make stops more desirable by reducing the amount of trash, and transit agency policies will place trash cans at higher-use stops before lower-use stops, and the regression tree model above captures this relationship. It is also generally expected that the number of alightings increases as the number of trips serving a transit stop increase, and this is also modeled in the regression tree above.

Regression Tree Models for Estimating Alightings: Full Dataset

The regression tree below models RTA alightings using the full dataset (i.e., Census, routing and scheduling, and stop characteristic data). As expected, independent variables included in the previous two models are again included in the model below that was developed using the full dataset. In fact, the

alighting model developed in this study using the full dataset is the same as the alighting model developed using only Census data, which indicates that the Census data used has more significant relationship to alightings than the routing, scheduling, and stop characteristics data used.

Because the alighting regression tree in this section is the same as the alighting regression tree developed using only Census data in the previous section, please see the previous section for a discussion of this regression tree.

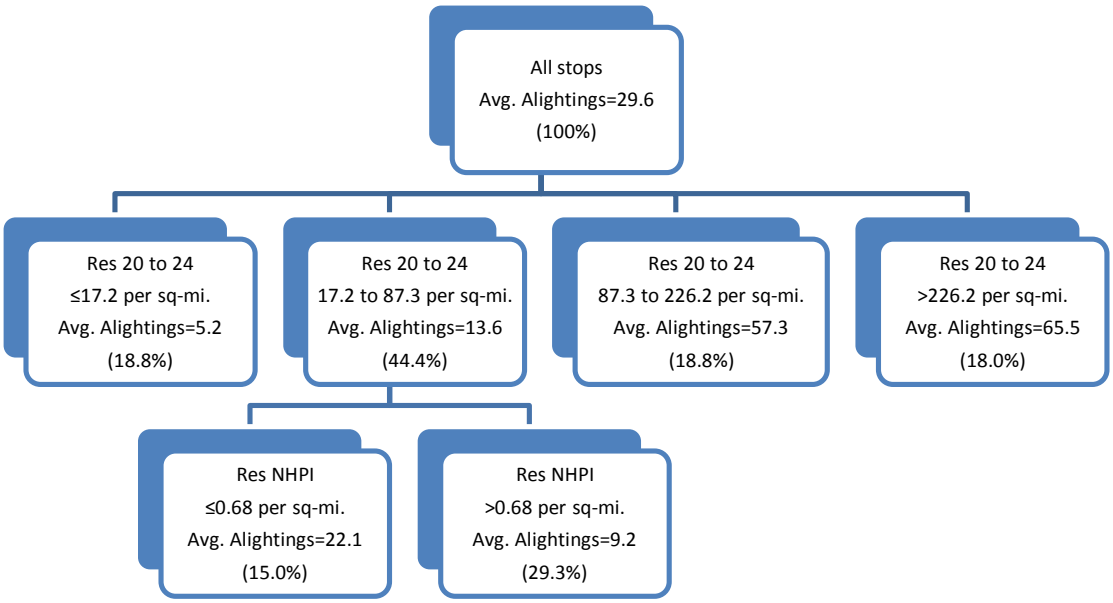

Figure 6: Offs – Full Dataset Regression Tree

This chapter developed and analyzed boardings and alightings regression tree models. Both the boardings and alightings regression tree models used population density independent variables to split the ridership data, and all models showed a positive relationship between higher population densities (specifically Asian and twenty to twenty-four year old residential population densities) and higher RTA ridership. Both the boarding and alighting regression tree models also used the presence of a trash can and the number of trips per day serving a stop to split the data, and the models showed positive relationships between these independent variables and increased RTA ridership. It is generally expected that transit ridership increases as population density and the number of trips serving a transit stop increases, and transit ridership is expected to be higher at stops with trash cans because they can create a sense of place, reduce trash, and policies will place trash cans at higher-use stops before lower-use stops.

It is interesting that the independent variables used to split the RTA ridership data did not vary more than they did between boardings and alightings; this is especially surprising for transit stop characteristic independent variables. One would expect that transit stop characteristics that contribute to a more desirable waiting experience (e.g., benches, shelters, trash cans, signage, etc…) would be more related to increases in boardings than alightings, but this was not identified by this study. These types of relationships may have been identified if the presence of a trash can was not included as an independent variable.

The results of the regression tree model analysis conducted in this chapter are applied as recommendations to increase RTA ridership through RTA system improvements and RTA marketing and planning focuses in the next chapter.

CHAPTER 5: CONCLUSIONS AND FUTURE WORK

This chapter offers recommendations to increase ridership of the RTA system and presents ideas for future work that could expand on this study. First, the data analysis conducted in chapter 4 is summarized, and the results are used to develop recommendations that are expected to increase ridership; two types of recommendations are offered:

1) Improvements to the RTA system
2) Potential focus areas for RTA marketing and planning efforts

Next, the applicability of the findings of this study to other transit systems is discussed. Finally, future work that would expand on the findings of this study is discussed.

RTA Improvement Recommendations

This section summarizes the key conclusions from the regression tree analysis in chapter 4 and offers recommendations to increase ridership of the RTA system. Both boarding and alighting regression tree models showed a positive relationship between higher RTA ridership and denser populations (specifically Asian and twenty to twenty-four year old residential population densities), more trips serving the stop, and the presence of a trash can. This is in-line with common sense expectations that transit ridership increases as population density increases, transit service increases, and transit stop characteristics improve. Keeping these findings in mind, the following sections offer recommendations for improvements to RTA's transit system and marketing and planning efforts.

RTA Transit System Improvement Recommendations

As RTA ridership generally increases as population density and transit service increase, RTA should study the feasibility of serving stops in areas with denser populations with more trips. Also, because RTA ridership is generally higher at stops with trash cans, RTA should also study the feasibility of adding (and servicing) trash cans at stops that do not have them, especially at stops that are already used heavily, served by many trips, and/or are in densely populated areas. It is possible that presence of trash cans alone will not drastically increase ridership (because correlation isn't necessarily causation), but trash cans can be attractive amenities for riders.

RTA Marketing and Planning Recommendations

Because Census tracts with higher population densities (specifically Asian and twenty to twenty-four year old residential population densities) are associated with higher RTA ridership, RTA should focus some of their marketing and planning efforts towards areas with denser residential populations. The tables below summarize the top eleven Census tracts in the RTA service area with the highest Asian residential population densities and the highest twenty to twenty-four year old residential population densities; population densities are presented in descending order. As can be seen in the tables below, Census tracts in San Luis Obispo, northern Los Osos, Santa Maria, Cal Poly, and southern Atascadero all have relatively high Asian and twenty to twenty-four year old residential population densities.

Table 8: Census Tracts in RTA Service Area with Highest Asian Residential Population Densities

ResAsian Density [Resident/sq-mi]	Tract Number	City/Place (Area of City/Place)
262.2	107.01	Los Osos (Northern)
207.7	111.01	San Luis Obispo (Downtown)
202.9	107.03	Los Osos (North-East)
190.2	111.02	San Luis Obispo (Downtown)
153.7	115.01	San Luis Obispo (South Higuera)
153.2	21.02	Santa Maria
137.3	109.01	Cal Poly
123.3	125.03	Atascadero (Southern)
121.7	21.01	Santa Maria
93.0	22.11	Santa Maria
64.2	110.02	San Luis Obispo (Uptown, Eastern)

Table 9: Census Tracts in RTA Service Area with Highest 20 to 24 Year Old Residential Densities

Res20to24 Density [Resident/sq-mi]	Tract Number	City/Place (Area of City/Place)
1938.1	111.01	San Luis Obispo (Downtown)
1346.1	111.02	San Luis Obispo (Downtown)
681.2	21.01	Santa Maria
497.2	112.00	San Luis Obispo (Northwest)
470.9	110.02	San Luis Obispo (Uptown, Eastern)
407.3	115.01	San Luis Obispo (South Higuera)
383.2	109.01	Cal Poly
306.4	21.02	Santa Maria
301.0	107.01	Los Osos (Northern)
280.0	101.02	Paso Robles (Downtown)
226.2	125.03	Atascadero (Southern)

Applicability to other Transit Systems

The analysis *method* this study developed can help identify and prioritize improvements to any transit system, and the *findings* of this study can be applicable to any transit system if assumptions can be made about the similarity of the system to the San Luis Obispo Regional Transit Authority system (e.g., a regional commuter transit system in a somewhat rural area with a temperate climate).

More general conclusions that could be applicable to more transit systems could be drawn if the analysis method used in this study were performed with more and/or larger datasets (e.g., other transit agencies, regional, statewide, national and/or global datasets), and this concept is a basis for the future work recommended in the next section.

Future Work

To expand on the work in this study, future work should seek to apply appropriate analysis methods using more and larger datasets comprised of more robust, accurate, and precise data. Furthermore, as is almost always the case, the datasets used as the basis of this study's analysis, and the accuracy, precision, and usefulness of the outcomes of the analysis could have been improved by using more robust, accurate, and precise data. This study would probably have benefited most from more robust and current ridership data.

More robust ridership data could be data collected over longer periods of time (e.g., collected all the time using transit ITS, instead of over a few days using on-board ride-checkers). More robust ridership data could also be data that is tied to rider characteristics (e.g., datasets that could be available if smart-card systems are in place). More robust stop characteristic data could include more stop characteristic datatypes (e.g., transit service schedule-adherence information collected with transit ITS, weather conditions, and/or the presence of an automated pass vending machine) that are collected at more precise levels (e.g., the number of seats, instead of the number of benches).

It should be noted that since this study was conducted, RTA has implemented automatic passenger counting (APC) and automatic vehicle location (AVL) transit ITS technologies, and the ridership and schedule-adherence data generated by these technologies should be available for future analyses.

Lastly, Census data is regularly updated and available for analyses, and methods to efficiently and effectively gather, aggregate, analyze, and apply Census data should continually be refined. For example, in the method presented in this study, Census data could be applied more effectively by tying it to individual

stops using tools like GIS. Using GIS, Census data could be allocated to stops according to travel-distances (or travel-times) from stops. The most effective way to do this is probably through use of the Network Analyst feature in ArcGIS, which can determine the distance (or travel time) of data points from transit stops according to travel-routes, by mode – this method would almost certainly be more effective than spatial radii methods that do not take travel-route options into consideration. This approach could also be applied to other datatypes (beyond Census data), like land use types and associated zoning regulations.

Findings of the future work described above should be shared with the public through appropriate channels.

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APPENDIX A: Prioritizing RTA Fixed-route Bus Stop Improvements Report

Prioritizing RTA Fixed-route Bus Stop Improvements

RTA Mission

The Mission of RTA is to provide safe, reliable and efficient transportation services that improve and enhance the quality of life for the citizens and visitors of San Luis Obispo County.

Goal

Develop a plan to make every fixed-route bus stop served by RTA ADA accessible, safe, convenient and comfortable for citizens and visitors of all ages and abilities, including those who use mobility devices like wheelchairs, scooters, rolling luggage, and strollers.

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Executive Summary

To further develop a safe, reliable, and efficient transit-centric transportation system in the greater San Luis Obispo area, this report seeks to prioritize RTA fixed-route bus stop improvements. The goal of this report is to ensure that, to the extent possible, every bus stop served by an RTA fixed-route bus is ADA accessible, safe, convenient, and comfortable for citizens and visitors of all ages and abilities, including those who use mobility devices like wheelchairs, scooters, rolling luggage, and strollers.

This report discusses existing conditions at RTA bus stops and presents some potential improvement options. The analysis considers safety, long-term locations, minimum ADA access requirements, access to nearby activity centers exceeding minimum ADA requirements, passenger amenities, pedestrian connections, traffic impacts, sight distance, and the potential for bus pull-out space. The report also evaluates passenger utilization by route at each individual bus stop. As such, high-use and relatively infrequently used bus stops are categorized to help prioritize potential improvements based on demand.

Local decision-makers should keep in mind that optimal solutions, including bus stop related improvements, depend on context. Optimal bus stop location and design solutions require local jurisdictions to consider how the environment surrounding each bus stop affects the attractiveness of using public transportation. For example, passenger amenities (bench, shade, etc.) may already exist immediately adjacent to a bus stop in an urban setting, yet it might be appropriate to add ambient lighting and a passenger shelter in a rural setting. In addition, transit user characteristics (e.g., people with disabilities, seniors, mothers with young children, homeless persons, business travelers, vacationers, cyclists, etc...) may dictate that local jurisdictions consider expanded passenger amenities to attract riders. Local land uses and traffic patterns can also affect optimal bus stop placement and design. Existing nearby public amenities like shelter, seating, lighting, trash receptacles, and/or bike parking effect optimal bus stop design.

Additionally, when considering potential RTA bus stop improvements, local decision-makers must consider financial feasibility and cost–effectiveness of potential solutions. It would be unwise to attempt to implement costly and complex urban solutions (e.g., a concrete bus pull-out, passenger shelter, and bus arrival prediction signs) at a rural bus stop that would have little chance of attracting a sufficient number of riders to justify the cost. In any case, RTA and the local officials should seek robust community input when prioritizing bus stop improvements in any given community.

To identify existing conditions, every bus stop served by RTA was inventoried by an RTA employee from June 2013 through October 2013. The Appendices A & B of this report include tables that summarize key findings for each fixed-route.

Key Findings

RTA High-Use Stops

- Over 75% of RTA fixed-route boardings and alightings occur at less than 20% of bus stops served by RTA.
- Of the approximately 125 current RTA bus stops, 21 are considered high-use RTA bus stops. High-use bus stops are defined as has having more than 1% of RTA system-wide boardings or alightings.
- All of the 21 high-use bus stops are ADA compliant.
- Of the five high-use multi-route transit passenger facilities served by RTA (and other fixed-route providers), three permit multiple buses to board and alight passengers simultaneously. However, of the three high-use stops served by multiple buses simultaneously, only one ADA compliant landing pad is present at both **Pismo Premium Outlets** and **Morro Bay Park** passenger facilities. These high-use passenger facilities lack sufficient landing area to simultaneously board or alight mobility devices from more than one bus at a time.
- **Santa Rosa @ Mustang Village & Stenner Glen Apartments** is the only high-use RTA stop used primarily for boarding that has no amenities for waiting passengers (e.g., no shelter and no seating).
- Of the 21 high-use RTA stops: 9 do not have RTA bus stop signs, 2 do not have RTA map/schedule holders, and 12 do not have Braille pads. Only eight have bike racks. Only three do not have trash receptacles.

ADA Compliance & Safe and Accessible Pathways

- To meet minimum ADA requirements, fixed-route bus stops must have a mobility device landing pad that is a firm and stable surface at least 5’ wide by 8’ deep (with no greater than a 2% slope) that connects to an accessible route.

- Of the approximately 125 bus stops served by RTA fixed-routes, 77 bus stops (greater than 60%) lack an acceptable mobility device landing pad.
- A total of 49 bus stops served by RTA fixed-routes do not connect to nearby sidewalks.
- Regarding safe pedestrian crossings, out of the 77 ADA non-compliant bus stops, 2 are adjacent to an at-grade railroad crossing, 10 are adjacent to streets with speed limits greater than 45 mph, 3 are adjacent to roadways with 4 or more lanes, and 38 do not have a labeled pedestrian crossing within sight. Obviously, RTA fixed-routes operate on many corridors with 45 mph or greater speed limits and no feasible adjacent travel options. As such, RTA must work closely with local jurisdictions when considering the placement of and improvements to bus stops. Nonetheless, transit authorities have been held liable for incidents involving transit users crossing busy streets while accessing bus stops that the agency knew or should have known caused their riders to face unacceptable risks. The Darlene Bonanno v. Central Contra Costa Transit Authority case is discussed in this report.

Phase I: Analyzing Bus Stops

For RTA to offer ADA accessible, safe, convenient and comfortable fixed-route transit services to users and residents of all ages and abilities, riders should be able to safely access all fixed-route bus stops, and to safely board and alight at every fixed-route bus stop. To access the bus stop safely, mobility device users require a safe and accessible pathway (ideally, a sidewalk separated from rail, high-speed automobile and bicycle traffic) that connects the bus stop to surrounding transit trip generators. To safely board and alight a bus, mobility device users require an ADA compliant mobility device landing pad at least five feet wide and eight feet deep positioned adjacent to the front door of a stopped bus.

Prior to investing in fixed-route bus stop improvements, RTA and local jurisdiction officials must evaluate existing conditions at the bus stop and develop a realistic improvement plan.

Minimum ADA Requirements:

Minimum ADA requirements for bus stops according to *ADA Accessibility Guidelines for Buildings and Facilities* (ADAAG) Section 10 are below[1]:

> **Minimum ADA Requirements**
>
> Providing accessible bus stops requires choosing appropriate locations or improving the existing location. Coordination and cooperation with public works agencies, municipal government and business owners can enhance the connectivity between the land use and the bus stop. To ensure optimum bus stop placement, coordination should occur during the planning/development phase.
>
> Bus stop sites must have the following:
>
> - A firm, stable surface;
> - A minimum clear length of 96 inches (eight feet), measured from the curb or vehicle roadway edge and a minimum clear width of 60 inches (five feet), measured parallel to the vehicle roadway;
> - A maximum slope of 1:50 (2%) for water drainage; and
> - Connection to streets, sidewalks or pedestrian paths by an accessible route.

Minimum dimensions of a mobility device landing pad

Safe and Accessible Pedestrian Crossings

The provision of accessible and safe pedestrian crossings that connect bus stops to nearby pedestrian paths of travel is essential to ensure transit user safety. Factors like proximity to railroad crossings, speed limits on adjacent streets, width of adjacent roadways and proximity to protected pedestrian crossings are important to transit user safety.

Transit authorities have been held liable for passenger incidents involving transit users crossing streets to access bus stops. For example, in 1993, while on her way to a bus stop, Darlene Bonanno entered a crosswalk at a 3-leg intersection that had no traffic controls for through traffic, and she was struck by a car and seriously injured. Ms. Bonanno sued the driver of the car that struck her, as well as the Central Contra Costa Transit Authority (CCCTA), Contra Costa County, and entities that treated her after the accident. In 1999, the Supreme Court of California found CCCTA and Contra Costa County each 1% liable. All parties except for CCCTA settled outside of court. CCCTA was ultimately held liable for over $1.5 million dollars.[3]

Prior to Ms. Bonanno being struck, there were indicators that accessing this particular bus stop was hazardous. In 1986, on her way to the same bus stop and crossing the same street (although midblock, not at the intersection) as Ms. Bonanno, Kimberly Chittock was struck by a car and killed. In 1987, 15 students complained that it was too dangerous to cross the same street to access the same bus stop. Later in 1987, Contra Costa County installed traffic signals with pedestrian push buttons at an intersection about 500 feet away from the bus stop. Although

pedestrians could now cross the street safely, the route to the bus stop was still hazardous, since it was not relocated to better access the safe street crossing.[3]

Safe crossings for transit users should be considered when developing a transit bus stop improvement plan.

Traffic Impact, Sight Distance, Pull-Out Space, and Safety

Ideally, a stopped bus does not unduly obstruct traffic or impair sight distance for nearby pedestrians or drivers. An ideal bus stop also affords space that allows buses to easily enter the bus-loading zone while decelerating, stop parallel to the bus-loading zone, and safely accelerate when exiting the bus-loading zone. Furthermore, an ideal bus stop provides ample space around a parked bus for passengers to safely enter and exit the stop and/or load or remove bikes from racks. It is also important for busses to be able to adequately reenter traffic after servicing a bus stop. Obviously, it would not be feasible – or even advisable – to provide a bus pull-out at every bus stop in San Luis Obispo County. Local decision-makers must decide if the surrounding uses, traffic levels, sight-lines, etc. warrant such a complex and costly solution.

Bus Stop Location Prioritization and Bus Pull-Out Space

The first step to prioritize bus stop improvements is to determine if current bus stop locations are optimal. Prior to prioritizing bus stop improvements, consensus should be reached by RTA and local jurisdiction officials regarding planned new or improved fixed-route bus stop locations. Factors to consider when identifying, evaluating, and selecting bus stop locations include:

Stop Location Prioritization

- Comfort, and convenience for transit route passengers (e.g., travel time, distance, out of direction travel, and cost)
- Accessibility, safety, comfort, and convenience of bus stops and pathway connections to adjacent developments
- Context sensitivity of bus stop with surrounding environment

Bus Pull-Out Space: Road Operation and Safety

- Effects of stopped bus on adjacent traffic and sight distance
- Ability of bus to decelerate to, stop at, and accelerate from bus stop
- Adequateness of space around stopped busses for transit user safety

Cost of Improvements & Available Funding Sources

RTA does not own any bus stops or adjacent land, so improvements to bus stops and surrounding areas typically requires partnerships with other agencies and/or adjacent property owners. This should be considered when evaluating potential new bus stop locations and estimating improvement costs related to a bus stop (e.g., expected grant availability and expected improvements along the RTA Route 9 in south Atascadero and the RTA Route 10 in Nipomo).

Phase II: Prioritizing Bus Stop Improvements

Once consensus of long-range bus stop locations has been reached by RTA and local jurisdiction officials, the next step is to prioritize stop improvements. This report seeks to prioritize installation of ADA accessible mobility device landing pads, safe and accessible connecting pathways, and passenger amenities that meet transit user needs. Factors to consider when prioritizing bus stop improvements include:

- Presence of mobility device landing pads.
- Presence accessible pathways between the bus stop and nearby transit trip generators.
- Presence of passenger amenities not required by ADA but are important for generating ridership. These amenities include safe pathways, benches, shelters, lighting, bicycle parking and passenger information.
- Proportion of boardings and alightings in relationship to the RTA system as a whole.
- Potential use by school buses and other forms of shared-ride transportation.
- Jurisdictional control of the bus stop.
- Cost to install ADA mobility device landing pad at stop (if not already provided)
- Cost to install accessible pathways connecting to the bus stop (if not already provided).
- Cost to install amenities not required by ADA.

Bus Stop Improvement Prerequisite I: Mobility Device Landing Pad(s)

If a fixed-route bus stop does not have a mobility device landing pad, by ADA requirements, RTA should not implement improvements to the bus stop before one is installed (or planned). Repair, replacement, and updated transit user information are exempt from this recommendation.

Bus Stop Improvement Prerequisite II: Safe and Accessible Pathways

This document defines **safe** and accessible pathways **between the bus stop and nearby transit trip generators** as an RTA bus stop planning prerequisite. It should be noted that ADA only requires a compliant mobility device landing pad that connects to any type of accessible pathway (e.g., an accessible but busy street). If a fixed-route bus stop is not connected to an accessible pathway, by ADA requirements, no improvements should implemented by RTA to the bus stop before an accessible pathway is installed (or planned).

Amenities to Meet Transit User Needs

On March 3rd, 2010, RTA staff proposed minimum standards for amenities that will create "safe, clean, comfortable, accessible stops with amenities that attract and retain customers" to the RTA Board of Directors. These are the minimum bus stop standards as proposed in 2010:

- All RTA bus stops will include a bus stop sign and information kiosk.
- Bus stops that have at least fifteen (15) boardings per day shall include a bus bench and trash receptacle.
- Bus stops that have at least twenty-five (25) boardings per day shall include a 13-foot passenger shelter with solar lighting or sufficient ambient light and a bike rack or bike locker.
- Bus stops that have at least forty (40) boardings per day shall include a 16-foot passenger shelter with solar lighting or sufficient ambient light and all amenities as noted above.
- New bus stops may also include a passenger shelter based upon the local jurisdiction requirements for new commercial or residential development in the corridor.

- RTA staff will work with local jurisdiction staff to incorporate local design requirements and develop a process for providing conditions to new commercial or residential development in the corridor.

- RTA staff will also work with the local arts councils on the development of an "Arts@Stops" program where local artists could incorporate their artwork at bus stops, as appropriate.

Re-evaluating these standards may be a worthwhile exercise. Factors to consider when prioritizing bus stops amenities include:

- Presence of bus stop sign and information kiosk.
- Presence of other amenities (e.g. seating, shelter, bike storage, trash, Braille pads).
- Passenger boarding proportion ranking (boarding passengers typically wait at stops, while alighting passengers rarely dwell at a bus stop).
- Typical wait times of users at bus stops.
- Travel characteristics of transit users at bus stops (e.g., mobility device users, people with disabilities, cyclists, etc.).
- Environment surrounding bus stop (e.g., adjacent land use, shelter, shade, lighting, interaction with sun, wind, and water, bike lanes, trash, public art, etc.).
- Number of seats needed at bus stops, based on typical passenger activity.
- Number of bike racks needed at bus stops.

From a purely liability avoidance perspective, implementing passenger amenities at bus stops should not be considered unless the bus stop meets minimum ADA requirements.

Proportion of Boardings and Alightings

The majority of RTA passenger trips are provided during weekday commute hours, so this analysis uses boarding and alighting (on/off) data collected on weekdays to prioritize improvements. If other overarching needs of community members suggest that certain bus stops should receive special consideration, then local officials could alter the priority to meet those needs. For example, construction of a low-income and/or accessible housing project adjacent to a deficient bus stop could warrant special consideration to meet community member needs.

Estimating RTA Bus Stop and Route Usage

To estimate proportion of weekday "ons/offs" for stops served by RTA fixed-routes, a useful data source exists from mid-April 2010 when RTA collected "on/off" data. This report uses this data to calculate percentage of boardings and alightings along each RTA route and at each RTA bus stop in relationship to the entire RTA fixed-route system. During this study period, 9,429 boardings and 9,299 alighting were recorded.

This "on/off" transit usage data was collected for all RTA bus stops and routes and was used to create RTA usage proportion tables used throughout this report.

RTA Route Usage Proportions

Proportions of passengers per RTA route are summarized in the table below.

	PCT of System ONS	PCT of System OFFS
RTA 10 Weekdays	33%	33%
RTA 9 Weekdays	32%	33%
RTA 12 Weekdays	32%	32%
RTA 15 Weekdays	2%	2%
Total (Check for correctness)	100%	100%

RTA High-Use Bus Stops

A table summarizing high use bus stops (i.e., bus stops with greater than 1% of the total RTA system boardings or alightings during the study period) is shown below. Notably, of the approximately 125 bus stops served by RTA fixed-route buses, over 77% of both boardings and alightings take place at the 21 bus stops listed below.

Where bus stops have moved or been renamed since "on/off" data was collected in 2010, names of stops serviced in 2013 nearest the discontinued 2010 stops are indicated in parentheses.

	PCT of System ONS ≥1%
	PCT of System OFFS ≥1%

High-Use Stops	Ons	Offs
Government Center	24.6%	22.1%
Cuesta College	7.9%	10.4%
Morro Bay Park	5.6%	4.9%
Atascadero City Hall	5.3%	4.3%
Cal Poly Kennedy Library (NB)	4.8%	1.2%
Pismo Prime Outlets	4.7%	4.0%
Pine Street @ 8th (Train Station) (Paso Robles Transit Center)	4.3%	5.1%
Town Center Mall (Santa Maria Transit Center)	3.7%	3.2%
Halcyon Park and Ride	2.8%	2.2%
Foothill @ Casa (NB) (Santa Rosa @ Mustang Village @ Stnr Gle	2.6%	0.2%
Las Tablas Park and Ride	2.2%	1.9%
E. Grand @ El Camino Real	1.9%	2.7%
Alan Hancock College (S. Bradley at Jones)	1.9%	2.3%
Tefft St. @ Carillo St. (NB)	1.7%	0.8%
Cal Poly Performing Arts center (NB)	1.1%	0.1%
Tefft St. @ Carillo St. (SB)	1.0%	1.2%
10th at LOVR	0.9%	1.0%
Cal Poly Kennedy Library (SB)	0.1%	4.2%
Foothill @ Casa (SB) (Santa Rosa @ Foothill)	0.1%	1.8%
Cal Poly Performing Arts Center (SB)	0.1%	2.0%
Monterey @ Grand	0.0%	1.4%
Total	**77.5%**	**77.1%**

Transit users typically spend more time at the bus stop when boarding because they wait at the bus stop for the bus to arrive; alighting passengers typically leave the bus stop upon exiting the bus (unless they are waiting to transfer to another bus or waiting to be picked up by a friend or relative). Transit user wait time and appropriate bus stop waiting amenities should be taken into consideration when planning and prioritizing bus stop improvements based on passenger activity.

Existing amenities beyond minimum ADA requirements for high use stops are shown in the table in APPENDIX A.

RTA Infrequently Used Bus Stops

A table summarizing infrequently used bus stops (i.e., bus stops with no recorded boardings or alightings during the study period) is below.

Unused Stops	ON	OFF
Moonstone @ Castle Inn	0	0
Moonstone @ Mariner's Inn (SB)	0	0
Main @ Jamaica	0	0
Main @ Bluebird Inn	0	0
Moonstone @ Mariner's Inn (NB)	0	0
Moonstone @ Firesiede Inn	0	0

RTA staff recommends considering ending service to these bus stops.

Assessment of RTA Multi-route Transit Hubs

RTA Multi-Route Transit Passenger Facilities: Existing Amenities at High-Use Bus Stops

Of the 21 high-use bus stops listed in the previous section, 5 are served by multiple RTA fixed-routes, as follows:

- **Government Center** is served by RTA Route 9, RTA Route 10, and RTA Routes 12/14.
- **Morro Bay Park** is served by RTA Route 12 and RTA Route 15.
- **Cal Poly Kennedy Library NB** is served by RTA Route 9NB, RTA Route 12NB and RTA Route 10x.
- **Santa Rosa at Mustang Village & Stenner Glen Apartments** is served by RTA Route 9NB and RTA Route 12/14NB.
- **Santa Rosa at Foothill** is served by RTA Route 9SB and RTA Route 12/14SB.

The table in APPENDIX A summarizes amenities and limitations at these high-use multi-route transit passenger facilities served by RTA. Key high-use multi-route transit passenger facilities findings include:

- The **Santa Rosa at Mustang Village** bus stop is the only high-use bus stop that lacks amenities for waiting passengers (i.e., no shelter and no seating).
- All five high-use passenger facilities have at least one ADA compliant mobility device landing pad and safe and accessible sidewalks and/or routes connecting the bus stop to nearby developments.
- At **Pismo Premium Outlets** and **Morro Bay Park** high-use passenger facilities, multiple buses stop simultaneously, but only one ADA compliant landing pad is present. These high-use passenger facilities lack sufficient landing area to simultaneously board or alight mobility devices from more than one bus at a time.

- **Cal Poly Kennedy Library NB** is the only high-use passenger facility that lacks an RTA bus stop sign.

- All five high-use passenger facilities have RTA information kiosks.

- All five high-use passenger facilities have sufficient lighting.

- **Morro Bay Park** and **Cal Poly Kennedy Library NB** are the high-use only passenger facilities with payphones within sight.

- Only **Government Center** and **Morro Bay Park** high-use passenger facilities have bike racks.

- Only **Cal Poly Kennedy Library NB** and **Santa Rosa at Foothill** high-use passenger facilities are directly connected to designated bike lanes.

- **Government Center** is the only high-use passenger facility with a Braille pad.

- **Santa Rosa at Mustang Village** and **Santa Rosa at Foothill** are the only high-use passenger facilities without a trash receptacle.

Existing amenities at high-use bus stops served by single RTA routes are discussed in the next sections.

Assessment of RTA Route 9

RTA Route 9 Bus Stop Usage: Proportion of Boardings and Alighting

RTA Route 9 Weekdays Southbound

9 Weekday Southbound WEEKDAY TOTALS	TOTAL		Total Stop Activity	PCT of System ONS	PCT of System OFFS
	ON	OFF			
Atascadero City Hall	435	56	491	4.61%	0.60%
Pine Street @ 8th (Train Station)	402	22	424	4.26%	0.24%
Las Tablas Park and Ride	193	13	206	2.05%	0.14%
ECR @ Car Wash	92	7	99	0.98%	0.08%
ECR @ Encina	86	62	148	0.91%	0.67%
ECR @ El Bordo	52	31	83	0.55%	0.33%
Viejo Camino @ Bocina	44	50	94	0.47%	0.54%
Mission @ 14th St.	44	0	44	0.47%	0.00%
ECR @ Plata	41	12	53	0.43%	0.13%
ECR @ Patria Circle	29	15	44	0.31%	0.16%
ECR @ Maple	23	23	46	0.24%	0.25%
Viejo Camino @ Santa Barbara	23	13	36	0.24%	0.14%
ECR @ Carrows	16	4	20	0.17%	0.04%
ECR @ Pueblo	14	8	22	0.15%	0.09%
ECR @ Santa Margarita	9	7	16	0.10%	0.08%
Kennedy Library (SB)	8	205	213	0.08%	2.20%
Performing Arts center (SB)	7	189	196	0.07%	2.03%
ECR @ Maria	6	11	17	0.06%	0.12%
Foothill @ Casa (SB)	5	65	70	0.05%	0.70%
ECR @ Carmel	5	7	12	0.05%	0.08%
Creston @ Melody	5	0	5	0.05%	0.00%
ECR @ Garden Farms	3	10	13	0.03%	0.11%
ECR @ Viejo Camino	3	8	11	0.03%	0.09%
Monterey @ Grand	2	131	133	0.02%	1.41%
Government Center	0	603	603	0.00%	6.48%
	1547	1552	3099	16.41%	16.69%

RTA Route 9 Weekdays Northbound

9 Weekday Northbound WEEKDAY TOTALS	TOTAL		Total Stop Activity	PCT of System ONS	PCT of System OFFS
	ON	OFF			
Government Center	780	0	780	8.27%	0.00%
Kennedy Library (NB)	239	30	269	2.53%	0.32%
Performing Arts center (NB)	106	12	118	1.12%	0.13%
Atascadero City Hall	63	343	406	0.67%	3.69%
Viejo Camino @ Bocina	60	54	114	0.64%	0.58%
Monterey @ Peach Tree Inn	56	5	61	0.59%	0.05%
ECR @ Encina	50	69	119	0.53%	0.74%
Foothill @ Casa (NB)	39	6	45	0.41%	0.06%
ECR @ Musselman	20	18	38	0.21%	0.19%
Las Tablas Park and Ride	17	164	181	0.18%	1.76%
ECR @ El Bordo	10	31	41	0.11%	0.33%
ECR @ Avenida Maria	9	35	44	0.10%	0.38%
ECR @ Solano	9	29	38	0.10%	0.31%
Pine Street @ 8th (Train Station)	8	455	463	0.08%	4.89%
ECR @ Santa Margarita	8	8	16	0.08%	0.09%
ECR @ Pueblo	7	22	29	0.07%	0.24%
ECR @ Maria	7	12	19	0.07%	0.13%
ECR @ Highway 41	6	65	71	0.06%	0.70%
ECR @ Garden Farms	6	6	12	0.06%	0.06%
ECR @ Palomar	5	31	36	0.05%	0.33%
ECR @ Adobe Plaza	3	35	38	0.03%	0.38%
ECR @ Principal	3	7	10	0.03%	0.08%
ECR @ Junipero	2	12	14	0.02%	0.13%
Viejo Camino @ Santa Barbara	2	11	13	0.02%	0.12%
ECR @ Viejo Camino	1	8	9	0.01%	0.09%
Mission @ 14th Street	0	25	25	0.00%	0.27%
ECR @ Carmel	0	6	6	0.00%	0.06%
	1516	1499	3015	16.08%	16.12%

RTA Route 9 Bus Stop Prerequisite Inventory Summary

A table in APPENDIX B provides a summary of bus stops served by RTA Route 9 that lack ADA accessible mobility device landing pads and/or safe and accessible pathways. Corresponding proportions of RTA system boardings and alightings are also presented for each of these bus stops. The table in APPENDIX B identifies improvement opportunities associated with these bus stops and provides staff recommendations for next steps to create a bus stop improvement plan.

RTA Route 9 High Priority Recommendation:

Remove landing pad obstructions: Mobility device landing pads at three relatively safe and accessible bus stops **(Cal Poly Kennedy Library NB, Cal Poly Performing Arts SB,** and **ECR at Encina NB)** exist but are obstructed by bus stop amenities.

RTA staff recommends removing obstructions to create ADA compliant landing pads all three of these stops.

RTA Route 9 Bus Stop Prerequisites: Mobility Device Landing Pads with Safe and Accessible Pathway Connections

Of the 51 RTA Route 9 bus stops, ten lack ADA accessible landing pads, so they are not ADA compliant. Twelve RTA Route 9 bus stops lack connected sidewalks. Six bus stops without landing pads are under San Luis Obispo County's jurisdiction, and all are found along El Camino Real and Santa Barbara Road from Maria Avenue in Santa Margarita to Bordeaux Apartments in South Atascadero. Four bus stops without landing pads are under San Luis Obispo City jurisdiction.

Six RTA Route 9 ADA compliant stops under San Luis Obispo County jurisdiction found in Santa Margarita and South Atascadero have landing pads, but no connecting sidewalks.

RTA Route 9 Pedestrian Crossings

At all six of the ADA non-compliant bus stops under San Luis Obispo County jurisdiction in Santa Margarita and South Atascadero, the speed limit of the adjacent street is 45 miles per hour or higher, and at five of the six stops, the speed limit of the adjacent street is 55 miles per hour.

Roadway widths are two to three lanes. None of these six bus stops have a protected pedestrian crossing within sight. Of these six bus stops, two are near an at-grade railroad crossing. Given the rural nature of these stops, installing pedestrian protection features like those typically found in urban settings is not feasible nor advisable at this time. If development patterns change, or if local officials become aware of undue hazards, RTA should work with local officials to potentially relocate these bus stops.

RTA Route 9 Pull-Out Space, Traffic Impact, and Sight Distance

Each of the six ADA non-compliant bus stops in Santa Margarita and South Atascadero under San Luis Obispo County jurisdiction is on a road shoulder. A parked bus at each bus stop temporarily obstructs sight distance for traffic entering the roadway. None have an adequate "No Parking" zone. At two of these stops, a stopped bus obstructs traffic **(Viejo Camino at Santa Barbara SB** and **ECR at Pine SB).** At one of these stops, a stopped bus blocks a business driveway **(ECR at Pine SB).** Based on the rural nature and relatively low traffic volumes in this area, it is not recommended at this time that the bus stops be relocated or altered.

RTA Route 9 Existing Amenities at High-Use Bus Stops

The following list provides a summary of existing passenger amenities at high-use RTA Route 10 bus stops. Corresponding proportions of RTA system boardings and alightings are also presented for each of these bus stops. The table of existing amenities at high-use stops is included in APPENDIX A.

- All seven high-use bus stops are ADA compliant, and have safe and accessible sidewalks and/or pathways connecting the bus stop to nearby transit trip generators.

- As can be seen in the table in APPENDIX A, of the seven high use bus stops served by RTA Route 9 exclusively, five high-use bus stops lack a bus stop sign **(Atascadero City Hall, Cal Poly Performing Arts Center NB & AB, Cal Poly Kennedy Library NB & SB,** and **Monterey @ Grand)**

- All seven of the bus stops with a high proportion of passenger boardings have both shelters and benches for waiting passengers.

- All three high-use bi-directional bus stops have bike racks, plus one has bike lockers **(Las Tablas Park and Ride)**.

- Two high-use bi-directional bus stops lack designated bicycle lanes connecting to the bus stop **(Paso Robles Transit Center** and **Cal Poly Performing Arts Center NB)**.

- All seven high-use bus stops have sufficient ambient lighting.

- One bus stop with a high proportion of passenger alightings lacks an RTA information kiosk **(Monterey @ Grand)**.

- Six high use bus stops lack Braille pads.

- Two high-use bus stops have payphones or call-boxes within sight of the bus stop **(Cal Poly Performing Arts Center NB** and **Cal Poly Performing Arts Center SB)**.

- All seven high-use bus stops have trash receptacles.

Assessment of RTA Route 10

RTA Route 10 Bus Stop Usage: Proportion of Boardings and Alightings

RTA Route 10 Weekdays Northbound

10 Daily Northbound WEEKDAY TOTALS	TOTAL		Total Stop Activity	PCT of System ONS	PCT of System OFFS
	ON	OFF			
Town Center Mall (Santa Maria Transit Center)	342	0	342	3.63%	0.00%
Prime Outlets	339	77	416	3.60%	0.83%
Allan Hancock	171	2	173	1.81%	0.02%
Tefft St. @ Carillo St. (NB)	163	79	242	1.73%	0.85%
Halcyon Park and Ride	142	118	260	1.51%	1.27%
E. Grand @ El Camino Real	100	115	215	1.06%	1.24%
Thompson Ave @ Branch St.	62	31	93	0.66%	0.33%
Greyhound (no longer served)	53	0	53	0.56%	0.00%
Marian Hospital	46	2	48	0.49%	0.02%
Nicholson St. @ Cypress St	38	0	38	0.40%	0.00%
Thompson Ave @ Nipomo HS	37	22	59	0.39%	0.24%
E. Main St. @ College Dr.	37	1	38	0.39%	0.01%
S Higuera St. @ Suburban Rd.	27	65	92	0.29%	0.70%
Thompson Ave @ Los Berros	16	18	34	0.17%	0.19%
S. Higuera @ Prado (no longer served)	13	39	52	0.14%	0.42%
South St. @ Beebee St (no longer served)	11	34	45	0.12%	0.37%
S. Higuera St. @ Margarita Ave	11	27	38	0.12%	0.29%
S. Higuera @ Hind (no longer served)	9	16	25	0.10%	0.17%
South St. @ High (no longer served)	6	12	18	0.06%	0.13%
S. Higuera @ Elks Lane (no longer served)	6	11	17	0.06%	0.12%
S. Higuera @ Chumash (no longer served)	6	10	16	0.06%	0.11%
South St. @ Meadow St. (no longer served)	4	28	32	0.04%	0.30%
South Street @ King (no longer served)	3	4	7	0.03%	0.04%
Santa Barbara @ Church (no longer served)	1	17	18	0.01%	0.18%
Government Center	0	740	740	0.00%	7.96%
Cal Poly @ Kennedy Library (NB)	0	63	63	0.00%	0.68%
Santa Rosa @ Higuera (no longer served)	0	46	46	0.00%	0.49%
Cal Poly @ Performing Arts	0	32	32	0.00%	0.34%
Marsh St @ Broad St.	0	25	25	0.00%	0.27%
South St. @ Exposition (no longer served)	0	9	9	0.00%	0.10%
	1643	1643	3286	17.42%	17.67%

RTA Route 10 Weekdays Southbound

10 Daily Southbound WEEKDAY TOTALS	TOTAL		Total Stop Activity	PCT of System ONS	PCT of System OFFS
	ON	OFF			
Government Center	708	0	708	7.51%	0.00%
Halcyon Park & Ride	126	82	208	1.34%	0.88%
Prime Outlets	104	299	403	1.10%	3.22%
Tefft St. @ Carillo St. (SB)	90	111	201	0.95%	1.19%
E. Grand @ El Camino Real	80	138	218	0.85%	1.48%
South Higuera St. @ Suburban	59	22	81	0.63%	0.24%
Cal Poly @ Mott Gym	49	0	49	0.52%	0.00%
South St. @ Beebee St. (Higuera at South)	41	7	48	0.43%	0.08%
S.Higuera St. @ Margarita	38	30	68	0.40%	0.32%
Thompson Ave @ Branch	35	47	82	0.37%	0.51%
South St. @ Broad St (no longer served)	24	7	31	0.25%	0.08%
Santa Barbara @ Church (no longer served)	24	1	25	0.25%	0.01%
S. Higuera @ Bridge St. (no longer served)	9	6	15	0.10%	0.06%
South Street @ Exposition (no longer served)	8	0	8	0.08%	0.00%
Thompson Ave @ HS	7	46	53	0.07%	0.49%
Marion Medical Center	7	28	35	0.07%	0.30%
S. Higuera @ Prado (no longer served)	7	11	18	0.07%	0.12%
Santa Barbara @ High (no longer served)	6	1	7	0.06%	0.01%
Town Center Mall (Santa Maria Transit Center)	5	301	306	0.05%	3.24%
Allan Hancock	4	212	216	0.04%	2.28%
S. Higuera @ Silver City Mobile (no longer served)	3	5	8	0.03%	0.05%
S. Higuera @ Granada (no longer served)	3	1	4	0.03%	0.01%
Nipomo St. @ Higuera St	2	0	2	0.02%	0.00%
South Street @ King St. (no longer served)	1	0	1	0.01%	0.00%
Greyhound (no longer served)	0	37	37	0.00%	0.40%
Thompson Ave @ Los Berros	0	11	11	0.00%	0.12%
Nicholson St. @ Cypress	0	7	7	0.00%	0.08%
	1440	1410	2850	15.27%	15.16%

RTA Route 10 Bus Stop Prerequisite Inventory Summary

A table in APPENDIX B provides a summary of bus stops served by RTA Route 10 that lack ADA accessible mobility device landing pads and/or safe and accessible connecting pathways. Corresponding proportions of RTA system boardings and alightings are also presented for each of these bus stops. The table in APPENDIX B also identifies improvement opportunities associated with these bus stops and provides staff recommendations for next steps to create a bus stop improvement plan.

RTA Route 10 High Priority Recommendation:

Remove landing pad and sidewalk obstructions: A mobility device landing pad at one relatively safe and accessible bus stop **(S. Higuera at Suburban NB)** exists but is obstructed by bus stop amenities. An ADA compliant sidewalk at one relatively safe and accessible bus stop **(Higuera at South SB)** exists but is obstructed by bus stop amenities.

RTA staff recommends removing obstructions to create ADA compliant landing pads and sidewalks at both of these stops.

RTA Route 10 Bus Stop Prerequisites: Mobility Device Landing Pads with Safe and Accessible Pathway Connections

Of the 24 RTA Route 10 bus stops, six lack ADA accessible landing pads. Four of these bus stops are under San Luis Obispo County jurisdiction **(Nipomo High School, Thompson at Branch, N. Thompson at Hwy 101 NB,** and **N. Thompson at Hwy 101 SB).** One of these bus stops is under Santa Maria jurisdiction **(Nicholson at E. Cypress).** The last of these six bus stops that lacks an ADA compliant landing pad is under San Luis Obispo City jurisdiction—it meets the five-foot width requirement but is technically one-inch shy of the eight-foot depth requirement (**Higuera at South SB**).

Of the five RTA Route 10 fixed-route bus stops that lack ADA compliant landing pads, five also lack connected sidewalks—four of these bus stops are under San Luis Obispo County's jurisdiction **(Nipomo High School NB, Thompson at Branch SB, N. Thompson at Hwy 101 NB,** and **N.**

Thompson at Hwy 101 SB) and one is under Santa Maria's jurisdiction **(Nicholson at E. Cypress)**.

Two bus stops meet ADA requirements but have noteworthy operational deficiencies. At the Alan Hancock College bus stop (**S. Bradley at Jones**) under Santa Maria jurisdiction, a bus can access an ADA compliant landing pad only if it stops awkwardly between the bus stop pole and the bus bay. At a bus stop under Pismo Beach jurisdiction, multiple buses stop simultaneously at the Pismo Beach Premium Outlets bus stop, but only one ADA compliant landing pad is present.

RTA Route 10 Pedestrian Crossings

At three ADA non-compliant bus stops, the speed limit of the adjacent street is at least 45 miles per hour **(Nipomo High School NB, N. Thompson at Hwy 101 NB,** and **N. Thompson at Hwy 101 SB)**. At two non-ADA compliant stops, roadway widths are greater than four lanes, **(Nipomo High School NB and Higuera at South SB)**. Four of the ADA non-compliant bus stops do not have a protected pedestrian crossing opportunity within sight **(Nipomo High School NB, Nicholson at E. Cypress, N. Thompson at Hwy 101 NB,** and **N. Thompson at Hwy 101 SB)**.

RTA Route 10 Pull-Out Space, Traffic Impact, and Sight Distance

Four of the six ADA non-compliant bus stops are on the road shoulder; all of which are in Nipomo under San Luis Obispo County jurisdiction **(Nipomo High School NB, Thompson at Branch SB, N. Thompson at Hwy 101 NB, and N. Thompson at Hwy 101 SB)**. A parked bus in each of the six ADA non-compliant bus stops obstruct traffic. A parked bus in four ADA non-compliant bus stops obstruct sight distance for traffic entering the roadway. None have an adequate "No Parking" zone.

RTA Route 10 Existing Amenities at High-Use Bus Stops

The following list provides a summary of existing amenities at high-use RTA Route 10 bus stops. Corresponding proportions of RTA system boardings and alightings are also presented for each of these bus stops. The table of existing amenities at high-use stops is included in APPENDIX A.

- Two high-use bus stops lack safe and accessible sidewalks and/or routes connecting the bus stop to nearby transit trip generators **(Pismo Prime Outlets and Teft st. @ Carillo St. NB).**

- Of the seven high-use bus stops served by RTA Route 10 exclusively, three lack RTA bus stop signs **(Santa Maria Transit Center, Halcyon Park and Ride,** and **Alan Hancock College)**. **** Notes:*** *Santa Maria does not allow RTA bus stop signs at SMAT bus stops. Halcyon Park and Ride has a large highly-visible RTA logo in the 4'x6' shelter display.*

- One bus stop with a high proportion of passenger boardings lacks an RTA information kiosk **(Santa Maria Transit Center)**.

- Five bus stops lack Braille pads.

- All seven of the high-use bus stops have both shelters and benches for waiting passengers.

- At two of the high-use bus stops, passengers could be hidden from view of an approaching bus **(Halycyon Park and Ride** and **Pismo Prime Outlets)**.

- All seven high-use bus stops have sufficient ambient lighting.

- Except for the **Alan Hancock College** bus stop, all five bi-directional high-use bus stops have bike racks.

- Four high-use bi-directional bus stops lack designated bicycle lanes connecting to the bus stop.

- All seven high-use bus stops have trash receptacles.

Assessment of RTA Route 12/14

RTA Route 12/14 Bus Stop Usage: Proportion of Boardings and Alightings

RTA Route 12/14 Weekdays

12A Daily WEEKDAY TOTALS	TOTAL		Total Stop Activity	PCT of System ONS	PCT of System OFFS
	ON	OFF			
Government Center	831	0	831	8.81%	0.00%
Cuesta Parking Lot 3 (SB)	421	175	596	4.46%	1.88%
Morro Bay Park (SB)	334	91	425	3.54%	0.98%
Kennedy Library (NB)	216	20	236	2.29%	0.22%
Foothill @ Casa (NB) (Santa Roas at Mstng / Stnr Glen)	205	9	214	2.17%	0.10%
Morro Bay Park (NB)	122	288	410	1.29%	3.10%
Cuesta Parking Lot 3 (NB)	116	676	792	1.23%	7.27%
10th @ LOVR	87	95	182	0.92%	1.02%
10th @ Santa Ynez	77	90	167	0.82%	0.97%
Cuesta Building 1400 (no longer served)	67	47	114	0.71%	0.51%
Pine @ LOVR	63	46	109	0.67%	0.49%
Cuesta West Side (no longer served)	58	12	70	0.62%	0.13%
Ramona @ 7th	46	27	73	0.49%	0.29%
Cuesta Building 1400 (no longer served)	44	42	86	0.47%	0.45%
Cuesta West Side (no longer served)	43	14	57	0.46%	0.15%
Pine @ Loma	42	29	71	0.45%	0.31%
Santa Ysabel @ 15th	32	3	35	0.34%	0.03%
Santa Ysabel @ 7th	29	9	38	0.31%	0.10%
11th @ Ramona	28	48	76	0.30%	0.52%
11th @ El Morro	27	51	78	0.29%	0.55%
LOVR @ Palisades	25	20	45	0.27%	0.22%
7th @ El Morro	23	16	39	0.24%	0.17%
2nd @ Santa Maria	21	17	38	0.22%	0.18%
South Bay Boulevard @ Quintana	18	12	30	0.19%	0.13%
Kansas Avenue	16	8	24	0.17%	0.09%
Santa Ysabel @ 15th	14	39	53	0.15%	0.42%
Kansas Avenue	13	6	19	0.14%	0.06%
Kennedy Library (SB)	6	187	193	0.06%	2.01%
Highland @ HWY 1	6	56	62	0.06%	0.60%
Patricia @ Foothill (no longer served)	6	0	6	0.06%	0.00%
Foothill @ Casa (SB) (Santa Rosa at Foothill)	5	102	107	0.05%	1.10%
South Bay Boulevard @ Quintana	5	10	15	0.05%	0.11%
Achievement House	3	4	7	0.03%	0.04%
LOVR @ Buckskin (no longer served)	2	0	2	0.02%	0.00%
Men's Colony	1	7	8	0.01%	0.08%
Government Center	0	709	709	0.00%	7.62%
LOVR @ Buckskin (no longer served)	0	6	6	0.00%	0.06%
Patricia @ Foothill (no longer served)	0	5	5	0.00%	0.05%
Men's Colony	0	1	1	0.00%	0.01%
	3052	2977	6029	32.37%	32.01%

RTA Route 12/14 Bus Stop Prerequisite Inventory Summary

A table in APPENDIX B provides a summary of bus stops served by RTA Route 12/14 that lack ADA accessible mobility device landing pads and/or safe and accessible connecting pathways. Corresponding proportions of RTA system boardings and alightings are also presented for each of these stops. The table in APPENDIX B also identifies improvement opportunities associated with these bus stops and provides staff recommendations for next steps to create a bus stop improvement plan.

RTA Route 12/14 High Priority Recommendation:

The lowest use RTA Route 12/14 bus stops that lack mobility device landing pads **(Kansas at Highway 1** and **California Men's Colony)** are currently served as call stops.

RTA staff recommends no immediate actions to stops served by RTA Route 12/14.

RTA Route 12/14 Bus Stop Prerequisites: Mobility Device Landing Pads with Safe and Accessible Pathway Connections

Of the 21 RTA Route 12/14 bus stops, twelve lack ADA accessible landing pads: all are under San Luis Obispo County jurisdiction. Eleven of these ADA non-compliant bus stops lack connecting pathways. Eleven of the twelve bus stops that lack landing pads are in Los Osos, except for **Kansas at Highway 1,** which is already a call stop and technically not considered part of fixed-route service.

Two ADA compliant bus stops under Morro Bay jurisdiction have landing pads but no connecting pathways **(South Bay at Quintana SB** and **South Bay at Quintana NB).**

RTA Route 12/14 Pedestrian Crossings

None of the non-ADA compliant bus stops have speed limits on adjacent streets that exceed 40 miles per hour or roadway widths greater than two lanes. Seven of the twelve ADA non-compliant

bus stops lack a protected pedestrian crossing opportunity within sight, and they are all under San Luis Obispo County jurisdiction (two are on the Highway 1 corridor and the other five are in Los Osos).

RTA Route 12/14 Pull-Out Space, Traffic Impact, and Sight Distance

Eleven of the twelve ADA non-compliant bus stops are on the road shoulder; ten of these bus stops are in Los Osos, and one is **Kansas at Highway 1;** all are under San Luis Obispo County jurisdiction. A bus temporarily parked in eleven of the twelve ADA non-compliant bus stops obstructs traffic; six obstruct sight distance for traffic entering the roadway, three obstruct residential driveways and one obstructs sightlines for parked vehicles. None have an adequate "No Parking" zone.

RTA Route 12/14 Existing Amenities at High-Use Bus Stops

The table in APPENDIX A provides a summary of existing amenities at high-use RTA Route 12/14 bus stops. Corresponding proportions of RTA system boardings and alightings are also presented for each of these bus stops.

Cuesta College is the only high-use bus stop served by RTA Route 12/14 exclusively; it is ADA compliant and has a sidewalk with a safe and accessible pathway to the campus core. The bus stop has an RTA bus stop sign, an RTA information kiosk, and a Braille pad. It also has passenger shelters, benches, ambient lighting, and trash and recycle receptacles. There are no bike racks, no bike lane is directly connected to the stop, nor is there a payphone within sight of the bus stop.

Assessment of RTA Route 15

RTA Route 15 Bus Stop Usage: Proportion of Boardings and Alightings

RTA 15 Weekdays Southbound

12B Weekday Southbound WEEKDAY TOTALS	TOTAL		Total Stop Activity	PCT of System ONS	PCT of System OFFS
	ON	OFF			
Burton @ Ardath	16	0	16	0.17%	0.00%
Burton @ Main	13	0	13	0.14%	0.00%
Ocean @ Cayicos Dr.	11	7	18	0.12%	0.08%
Ocean @ 9th	11	1	12	0.12%	0.01%
Hearst Castle	10	0	10	0.11%	0.00%
Highway 1 @ San Jacinto	9	6	15	0.10%	0.06%
Ocean @ 3rd	9	3	12	0.10%	0.03%
Ardath @ Green (Ardath @ Hwy 1)	8	0	8	0.08%	0.00%
Main @ Arlington	7	0	7	0.07%	0.00%
Moonstone @ Windsor	6	0	6	0.06%	0.00%
Burton @ Cambria Pines Lodge	6	0	6	0.06%	0.00%
Main @ Tamson	5	0	5	0.05%	0.00%
Main @ Errol (no longer served)	4	9	13	0.04%	0.10%
Ocean @ Old Creek Rd.	4	5	9	0.04%	0.05%
Main @ Bluebird	3	1	4	0.03%	0.01%
Main @ Veterans Hall	3	0	3	0.03%	0.00%
Morro Bay Park	0	76	76	0.00%	0.82%
Moonstone @ San Simeon Pines	0	7	7	0.00%	0.08%
Hearst Drive @ San Simeon	0	0	0	0.00%	0.00%
Moonstone @ Castle Inn	0	0	0	0.00%	0.00%
Moonstone @ Mariner's Inn (SB)	0	0	0	0.00%	0.00%
	125	115	240	1.33%	1.24%

RTA Route 15 Weekdays Northbound

12B Weekday Northbound WEEKDAY TOTALS	TOTAL		Total Stop Activity	PCT of System ONS	PCT of System OFFS
MORRO BAY	ON	OFF			
Morro Bay Park	75	0	75	0.81%	0.00%
Ocean @ Cayucos Dr. (Cayucos @ Ash)	8	3	11	0.08%	0.03%
Main @ Errol (no longer served)	7	0	7	0.07%	0.00%
Main @ Elena (no longer served)	4	3	7	0.04%	0.03%
Main @ Veterans Hall (Main @ Skate Park)	3	7	10	0.03%	0.07%
Main @ San Joaquin	3	4	7	0.03%	0.04%
Burton @ Yorkshire	2	5	7	0.02%	0.05%
Main @ Bonita (no longer served)	2	2	4	0.02%	0.02%
Moonstone @ Windsor	1	9	10	0.01%	0.10%
Ardath @ Green (Ardath @ Hwy 1)	1	4	5	0.01%	0.04%
Burton @ Ardath	0	17	17	0.00%	0.18%
Burton @ Main	0	15	15	0.00%	0.16%
Hearst Castle	0	9	9	0.00%	0.10%
Ocean @ 8th St	0	7	7	0.00%	0.07%
Ocean @ 4th (Ocean @ 3rd (NB))	0	6	6	0.00%	0.06%
Main @ Tamson	0	4	4	0.00%	0.04%
Castillo @ Otter	0	3	3	0.00%	0.03%
Ocean @ Old Creek Rd	0	2	2	0.00%	0.02%
Moonstone @ San Simeon Pines	0	2	2	0.00%	0.02%
Cornwall @ Arlington (Main @ Cornwall)	0	1	1	0.00%	0.01%
Main @ Jamaica (no longer served)	0	0	0	0.00%	0.00%
Main @ Bluebird Inn	0	0	0	0.00%	0.00%
Moonstone @ Mariner's Inn (NB)	0	0	0	0.00%	0.00%
Moonstone @ Firesiede Inn	0	0	0	0.00%	0.00%
	106	103	209	1.14%	1.09%

RTA Route 15 Existing Amenities at High-Use Bus Stops

Since it lacks a single bus stop with greater than 1% of the total RTA system boardings and alightings, RTA Route 15 alone serves no high-use bus stops.

Morro Bay Park is a high-use stop, and it is discussed in the high-use multi-route passenger facility section above. Morro Bay Park is served by RTA Route 12, RTA Route 15, and Morro Bay Transit services.

RTA Route 15 Bus Stop Prerequisite Inventory Summary

A table in APPENDIX B provides a summary of bus stops served by RTA Route 15 that lack ADA accessible mobility device landing pads and/or safe and accessible connecting pathways. Corresponding proportions of RTA system boardings and alightings are also presented for each of these bus stops. The table in APPENDIX B also identifies improvement opportunities associated with these stops and provides staff recommendations for next steps to create a bus stop improvement plan.

RTA Route 15 High Priority Recommendation:

Remove landing pad and sidewalk obstructions: A mobility device landing pad at one relatively safe and accessible stop **(MAIN at CORNWALL** in Cambria**)** exists but is obstructed by a bench connected to the "Old Station Store."

> *RTA staff recommends working with the "Old Station Store" property owner to remove obstructions to create an ADA compliant landing pad.*

RTA Route 15 Bus Stop Prerequisites: Mobility Device Landing Pads with Safe and Accessible Pathway Connections

Of the 37 RTA Route 15 bus stops, 31 lack ADA accessible landing pads. One of these ADA non-compliant bus stops **(Highway 1 at SAN JACINTO)** is under Morro Bay jurisdiction. The rest of the 30 bus stops are under San Luis Obispo County jurisdiction.

Of the 31 RTA Route 15 stops without landing pads, 23 also lack connecting pathways; all of these bus stops are under San Luis Obispo County jurisdiction.

Two ADA compliant stops under Morro Bay jurisdiction have landing pads but lack connecting pathways **(South Bay at Quintana SB** and **South Bay at Quintana NB).**

RTA Route 15 Pedestrian Crossings

At one ADA non-compliant bus stop, the speed limit of the adjacent street exceeds 45 miles per hour and the roadway is five lanes wide (**Highway 1 @ SAN JACINTO**).

A total of 20 of the ADA non-compliant bus stops along the north coast lack a protected pedestrian crossing opportunity.

RTA Route 15 Pull-Out Space, Traffic Impact, and Sight Distance

A total of 18 of the 31 ADA non-compliant bus stops are on the road shoulder; all of which are under San Luis Obispo County jurisdiction. A bus temporarily parked in 24 of the 31 ADA non-compliant bus stops obstructs traffic; all 24 obstruct sight distance for traffic entering the roadway, 5 obstruct business driveways, and 2 obstruct parked vehicles. A total of 29 lack a "No Parking" zone.

References

[1] Easer Seals Project Action (2006). Toolkit for the assessment of Bus Stop Accessibility and Safety, (pp. 6 and pp. 14-15). Washington, DC.

[2] U.S. Department of Transportation, Federal Highway Administration (February 2008). Pedestrian Safety Guide for Transit Agencies, (pp. 37). Washington, DC.

[3] Darlene Bonanno v. Central Contra Costa Transit Authority, Supreme Court of California

APPENDIX A: Amenities at High-Use RTA Bus Stops

High-Use Bus Stop Ridership Proportions and Existing Amenities

High-Use Bus Stop Ridership Proportions and Existing Amenities

					ADA Compliance	Hidden Passengers	Adjacent Properties	Signage and Route finding			Amentities for Waiting Passengers			Lighting	Bikes		Trash	Payphone / Call-box	Vending
		High-Use Stops	Ons	Offs	Infrastructure (i.e. landing pad and connection) at the stop ADA Compliant?	Obstructions hidding waiting passengers from view of approaching bus	Adjacent properties:	RTA bus stop sign	RTA information kiosk	Braille Pad	Benches	Shelter	alternative shelter	Lighting	Bike rack or bike storage	Labeled bike lane connecting to bus stop	Trash receptacle at bus stop	Pay phone or police call box within sight of the bus stop?	Newspaper vending
Multi-route		Government Center	24.59%	22.07%	Yes	No	Small Retail, Office Building, Government Buildings, Library	Yes	Yes	Yes	4 in shelter, 4 free standing	two: 4.5' x 20' each	N/A	Street light, Solar shelter light	Ribbon Rack	No	Bolted	No	No
RTA 12/14	Bidirectional	Cuesta College	7.94%	10.39%	Yes	No	Cuesta College	Yes	Yes	Yes	4 in shelter	two: 12'x4' each	N/A, Trees	Hardwired shelter light, Walkway lights, Lights in adjacent parking lot	None	No	2 unsecured trash, +2 unsecured recycle	No	Yes
Multi-route		Morro Bay Park	5.64%	4.89%	Yes	Shelter	Residential Homes, Government Buildings, Fire Dept.	Yes	Yes	No	2 in shelter, 1 free standing	17' x 16'	N/A, Trees	Street light	Ribbon Rack	No	Heavy	Yes, in shelter	No
RTA 9	Bidirectional	Atascadero City Hall	5.28%	4.29%	Yes	Info kiosk, Curve	Shopping Mall / Center, Office Building, Public Parking Lot, Government Buildings, Library, Galaxy Theatre	No	Yes	No	4 in shelter, 6 free standing	two: 12' x 23' each	N/A	Solar shelter light, Walkway lights	Yes, 2 reverse U's	Yes	3 bolted	No	No
Multi-route		Cal Poly Kennedy Library (NB)	4.83%	1.22%	Yes	No	Public Parking Lot, Government Buildings, Library, Lecture Halls, Classrooms	No	Yes	No	2 in shelter, 1 free standing	two: 8' x 5' and 12' x 5'	N/A	Street light, Solar shelter light, Lights in adjacent parking lot	None	Yes	Bolted +Recycle	Yes	Yes
RTA 10	Bidirectional	Pismo Prime Outlets	4.70%	4.04%	Yes	Shelter	Small Retail, Shopping Mall / Center, Public Parking Lot	Yes	Yes	Yes	1 in shelter, 2 free standing	11.5' x 5'	N/A	Street light, Hardwired shelter light, In adjacent parking lot	Peak Rack	No	Bolted	No	No
RTA 9	Bidirectional	Pine Street @ 8th (Train Station) (Paso Robles Transit Center)	4.35%	5.13%	Yes	No	Residential Homes, Small Retail, Public Parking Lot, Government Buildings, Vacant Lot, Transportation Center	Yes	Yes	No	1 in shelter, 1 free standing	two: 12' x 4'	N/A, Awnings at Transit Center, Trees	Street light, Walkway lights	Reverse U	No	1 bolted	No	No
RTA 10	Bidirectional	Town Center Mall (Santa Maria Transit Center)	3.68%	3.24%	Yes	No	Residential Homes, Small Retail, Office Building, Park, Vacant Lot	No	No	No	Transit center: many -- see photos	Transit center: many -- see photos	N/A	Street light, Walkway lights, In adjacent parking lot, On adjacent building	Many revers U's' -- see photos	No	Yes, many -- see photos	No	Yes
RTA 10	Bidirectional	Halcyon Park and Ride	2.84%	2.15%	Yes	Parked Vehicles	Residential Homes, Small Retail, Motel / Hotel	No	Yes	No	1 in shelter	16' x 15.5'	N/A	Street light, Solar shelter light	Peak Rack	Yes	Unsucured	No	No
Multi-route		Foothill @ Casa (NB) (Santa Rosa @ Mustang Village & Stnr Glen Apts.)	2.59%	0.16%	Yes	No	Mustang Village and Stenner Glen Apts, Small retail across street	Yes	Yes	No	None	None	No, Tress	Street light, Walkway lights	None	No	None	No	No
RTA 9	Bidirectional	Las Tablas Park and Ride	2.23%	1.90%	Yes	No	Office Building, Vacant Lot	Yes	Yes	Yes	1 in shelter, 1 free standing	4.5' x 138"	N/A	In adjacent parking lot	Ribbon Rack, 2 lockers	Yes	1 unsecured, 1 chained	No	No
RTA 10	Bidirectional	E. Grand @ El Camino Real	1.91%	2.72%	Yes	No	Small Retail	Yes	Yes	No	Bench inside shelter, Free standing bench	12' x 5'	N/A, Trees	Street light, Solar shelter light, In adjacent parking lot, On adjacent building	Reverse U	No	2 bolted	No	No
RTA 10	Bidirectional	Alan Hancock College (S. Bradley at Jones)	1.86%	2.30%	Yes	No	Alan Hancock College	No	Yes	No	1 in shelter	13' x 5'	N/A	Street light, Hardwired shelter light, In adjacent parking lot	None	No	Bolted	No	No
RTA 10	Northbound	Tefft St. @ Carillo St. (NB)	1.73%	0.85%	Yes	No	Small Retail, Vacant Lot	Yes	Yes	Yes	1 in shelter	10.5' x 5'	N/A	Street light	None	No	Bolted	No	No
RTA 9	Northbound	Cal Poly Performing Arts Center (NB)	1.12%	0.13%	Yes	No	Cal Poly: Performing Arts Center, University Union, Admin, Dorms	No	Yes	No	2 in shelter, 2 free standing	two: 12' x 55'	N/A, Tree	Street light, Solar shelter light, On adjacent building	None	No	Bolted +Recycle	Yes	Yes
RTA 10	Southbound	Tefft St. @ Carillo St. (SB)	0.95%	1.19%	Yes	No	Small Retail, Vacant Lot	Yes	Yes	No	1 in shelter	11' x 4.5'	N/A	Street Light	None	No	Bolted	No	No
RTA 9	Southbound	Cal Poly Kennedy Library (SB)	0.15%	4.22%	Yes	No	Public Parking Lot, Government Buildings, School, Library	No	Yes	No	1 in shelter, 1 free standing	4.5'x9'	N/A	Street light, Solar shelter light, In adjacent parking lot	Peak rack	Yes	Bolted +Recycle	No	Yes
Multi-route		Foothill @ Casa (SB) (Santa Rosa @ Foothill)	0.11%	1.80%	Yes	No	Small Retail, Office Building	Yes	Yes	No	None	None	Yes, Office Building Porch, Trees	In adjacent parking lot, On adjacent building	None	Yes	None	No	No
RTA 9	Southbound	Cal Poly Performing Arts Center (SB)	0.07%	2.03%	Yes	No	Apartments, Cal Poly: Performing Arts Center, University Union, Dorms, Admin.	No	Yes	No	1 in shelter, 2 free standing	8' x 5'	N/A	Street light, Solar shelter light	None	Yes	Bolted +Recycle	Yes	Yes
RTA 9	Southbound	Monterey @ Grand	n/a	1.41%	Yes	Parked Vehicle, Large blank sign	Small Retail, Monterey St. Hotel/Motel Row	No	No	No	None	None	No	Street light, In adjacent parking lot, On adjacent building	None	Yes	Bolted	No	No
			76.57%	76.13%															

High Boardings without Amentities for Waiting Passengers

APPENDIX B: Non-ADA Compliant RTA Bus Stops

RTA 9 Bus Stops without ADA Mobility Device Landing Pads and/or Accessible Connected Throughways - 2013 Assessment

RTA 9 Bus Stops without ADA Mobility Device Landing Pads and/or Accessible Connected Throughways - 2013 Assessment

						ADA Accessible Landing Pads & Sidewalks		Pedestrian Crossings				Pull-out Space, Traffic Impact, and Sight Distance			
						Mobility Device Landing Pad	Connected Sidewalk	Railroad X-ing	Speed Limit	# of Lanes	Nearest Crossing	Pull-out space	Bus as Obstruction	Sight Distance	"No Parking"
		Bus Stop Name	PCT of System ONS	PCT of SYSTEM OFFS	Jurisdiction	Are adequate ADA-compliant mobility device landing pads provided?	Sidewalks and Bus Stop Connectivity	Near at-grade railroad crossing?	Posted speed limit 45 mph or above?	Including both sides of road, total auto lanes	Nearest protected pedestrian crossing opportunity within sight	Bus stop pull-out space	Is a stopped bus an obstruction? To what?	Poor sight distance?	Adequate "No Parking Zone"?
RTA 10	Northbound	Cal Poly Kennedy Library	4.95%	1.24%	Cal Poly	Obstructed by bus stop amenities	Sidewalk	No	No, 25	2	Intersection & Mid-block crosswalk	Sidewalk & loading zone < 9' wide & curb/fog lane < 14' wide	Yes: Traffic, Crosswalk	No	No, 0'
RTA 9	Northbound	ECR at Encina	0.53%	0.74%	SLO City	Obstructed by bus stop amenities	Sidewalk	No	No, 35	2	Intersection	Sidewalk and loading zone ≥ 9' wide	Yes: Business driveway	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 9	Southbound	Viejo Camino at Bodina (Bordeaux Apts)	0.47%	0.54%	SLO County	No mobility device landing pad	No Sidewalk	No	Yes, 55	3	None	Road shoulder without a sidewalk	No	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 110'
RTA 9	Southbound	Viejo Camino at Santa Barbara	0.24%	0.14%	SLO County	No mobility device landing pad	No Sidewalk	No	Yes, 55	2	None	Road shoulder without a sidewalk	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 9	Southbound	ECR at Santa Margarita	0.10%	0.08%	SLO County	Mobility Device Landing Pad	No Sidewalk	No	Yes, 55	2	None	Road shoulder without a sidewalk, Bus Bay	No	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 9	Northbound	ECR at Santa Margarita (Country Care)	0.08%	0.09%	SLO County	No mobility device landing pad	No Sidewalk	No	Yes, 55	2	None	Road shoulder without a sidewalk	No	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 9	Southbound	Cal Poly Performing Arts	0.07%	2.03%	Cal Poly	Obstructed by bus stop amenities	Sidewalk	No	No, 25	2	Intersection	Sidewalk and loading zone ≥ 9' wide, Bus Bay	No	No	No, 60'
RTA 9	Northbound	ECR at Maria	0.07%	0.13%	SLO County	No mobility device landing pad	Disconnected Sidewalk	No	Yes, 45	2	None	Road shoulder without a sidewalk	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 9	Northbound	ECR at Pine (Garden Farms)	0.06%	0.06%	SLO County	No mobility device landing pad	No Sidewalk	Yes	Yes, 55	2	None	Road shoulder without a sidewalk	No	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 9	Southbound	ECR at Carmel	0.05%	0.08%	SLO County	Mobility Device Landing Pad	No Sidewalk	No	Yes, 55	3	None	Road shoulder without a sidewalk, Bus Bay	No	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 9	Southbound	ECR at Pine (Garden Farms)	0.03%	0.11%	SLO County	No mobility device landing pad	No Sidewalk	Yes	Yes, 55	2	None	Road shoulder without a sidewalk	Yes: Traffic, Business Driveway	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 9	Northbound	Viejo Camino at Santa Barbara	0.02%	0.12%	SLO County	Mobility Device Landing Pad	No Sidewalk	No	Yes, 55	2	None	Road shoulder without a sidewalk, Bus bay only 38' long	Yes: Traffic, Business Driveway	Yes, from curve	No, 0'
RTA 9	Northbound	ECR at Carmel	0.00%	0.06%	SLO County	Mobility Device Landing Pad	No Sidewalk	No	Yes, 55	3	None	Road shoulder without a sidewalk, Bus Bay	No	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 9	Northbound	Grand at Wilson (NB)	No Match	No Match	SLO City	No mobility device landing pad	Sidewalk (cracks)	No	No, 35	5	Intersection	Sidewalk and loading zone ≥ 9' wide	Yes: Traffic	For Pedestrians using crosswalks	No, 93'
RTA 9	Southbound	Santa Rosa at Murray	No Match	No Match	SLO City	No mobility device landing pad	Unobstructed width < 3 feet, Constricted width < 3', Empty tree wells, Sidewalk (cracks, uplifts)	No	No, 35	4	Intersection	Sidewalk & loading zone < 9' wide & curb/fog lane < 14' wide	No	No	Yes
RTA 9	Northbound	Grand at McCollum	No Match	No Match	SLO City	No mobility device landing pad	Sidewalk	No	No, 25	5	None	Sidewalk & loading zone < 9' wide & curb/fog lane < 14' wide	Yes: Traffic	No	No, 71'
RTA 9	Northbound	Santa Rosa at Murray	No Match	No Match	SLO City	No mobility device landing pad	Sidewalk	No	No, 35	5	Intersection	Sidewalk & loading zone < 9' wide & curb/fog lane < 14' wide	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 9	Northbound	ECR at Santa Clara	No Match	No Match	SLO County	Mobility Device Landing Pad	No Sidewalk	No	Yes, 55	2	None	Road shoulder without a sidewalk, Bus Bay	No	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 9	Southbound	ECR at Santa Clara	No Match	No Match	SLO County	Mobility Device Landing Pad	No Sidewalk	No	Yes, 55	2	None	Road shoulder without a sidewalk, Bus Bay	No	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'

Problem	No mobility device landing pad	No Sidewalk	Near at-grade railroad crossing	High Speed Traffic	Wide pedestrian crossings	No Pedestrian Crossing Opportunity	Inadequate pull-out space	Stopped bus obstructs traffic	Poor sight distance to/from bus stop	Inadequate "No Parking" Zone
Reccomendation	Consider planning mobility device landing pad, moving stop, ending service to stop, or maintaining status quo	Consider planning sidewalk, moving stop, ending service to stop, or maintaining status quo	Consider moving stop or ending service to stop, or maintaining status quo	Consider lowering speed limit, moving stop, or ending service to stop, or maintaining status quo	Consider narrowing pedestrian street crossing, or moving stop, or ending service to stop, or maintaining status quo	Consider installing pedestrian protected crossing, or moving stop, or ending service to stop, or maintaining status quo	Consider redesigning stop, moving stop, or ending service to stop, or maintaining status quo	Consider redesigning stop, moving stop, or ending service to stop, or maintaining status quo	Consider redesigning stop, moving stop, or ending service to stop, or maintaining status quo	Consider planning additional "No Parking" space, or redesigning stop, moving stop, or ending service to stop, or maintaining status quo
Problem	**Unsatisfactory Mobility Device Landing Pad**	**Disconnected Sidewalk**								
Reccomendation		Consider planning connecting sidewalk, moving stop, ending service to stop, or maintaining status quo								
Problem	**Obstructed mobility device landing pad**	**Constricted, limited, or cracked sidewalk**								
Reccomendation	Consider removing landing pad obstructions or maintaining status quo	0								

RTA 10 Bus Stops without ADA Mobility Device Landing Pads and/or Accessible Connected Throughways - 2013 Assessment

RTA 10 Bus Stops without ADA Mobility Device Landing Pads and/or Accessible Connected Throughways - 2013 Assessment

						ADA Accessible Landing Pads & Sidewalks		Pedestrian Crossings				Pull-out Space, Traffic Impact, and Sight Distance			
						Mobility Device Landing Pad	Connected Sidewalk	Railroad X-ing	Speed Limit	# of Lanes	Nearest Crossing	Pull-out space	Bus as Obstruction	Sight Distance	"No Parking"
		Bus Stop Name	PCT of System ONS	PCT of SYSTEM OFFS	Jurisdiction	Are adequate ADA-compliant mobility device landing pads provided?	Sidewalks and Bus Stop Connectivity	Near at-grade railroad crossing?	Posted speed limit 45 mph or above?	Including both sides of road, total auto lanes	Nearest protected pedestrian crossing opportunity within sight	Bus stop pull-out space	Is a stopped bus an obstruction? To what?	Poor sight distance?	Adequate "No Parking Zone"?
RTA 10	Northbound, Southbound	Pismo Beach Premiun Outlets	4.70%	4.04%	Pismo Beach	No mobility device landing pad, except for busses stopped at shelter	Sidewalk	No	No, 30	5	Intersection	Sidewalk and loading zone≥ 9' wide	No	For traffic entering roadway from cross-streets, driveways, or parking spaces	Multiple buses, 172' total
RTA 10	Northbound, Southbound	El Camino Real at Halcyon	2.84%	2.15%	Arroyo Grande	Mobility Device Landing Pad	Access to handicap parking spaces only	No	No, 35	2	Mid-block crosswalk	Sidewalk & loading zone < 9' wide & curb/fog lane < 14' wide	Yes: Traffic, Business driveway, Crosswalk, Parked vehicle(s)	For pedestrians using crosswalks	No, 0'
RTA 10	Northbound, Southbound	S. Bradley at Jones	1.86%	2.30%	Santa Maria	No mobility device landing pad (unless bus stops crookedly between bus stop pole and bu bay).	Sidewalk	No	No, 30	2	Intersection	2 stops: one at bus stop pole and one in bus bay, w/ Sidewalk & loading zone < 9' wide & Bus Bay	Yes: Traffic (if stopped at bus stop pole)	For traffic entering roadway from cross-streets, driveways, or parking spaces (if stopped at bus stop pole)	No, 54' in bus bay & Yes 121' at bus stop pole
RTA 10	Southbound	Higuera at South	0.43%	0.08%	SLO City	7'11" deep mobility device landing pad	Obstructed by bus stop amenities	No	No, 30	5	Intersection	Sidewalk & loading zone < 9' wide & curb/fog lane < 14' wide	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 80'
RTA 10	Northbound, Southbound	Nicholson at E. Cypress	0.40%	0.08%	Santa Maria	No mobility device landing pad	Disconnected Sidewalk	No	No	2	None	Sidewalk & loading zone < 9' wide & curb/fog lane < 14' wide	Yes: Traffic	Yes, from curve	No, 52'
RTA 10	Northbound	Nipomo High School	0.39%	0.24%	SLO County	No mobility device landing pad	No Sidewalk	No	Yes, 45	4	None	Road shoulder without a sidewalk	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 10	Southbound	Thompson at Branch	0.37%	0.51%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 35	3	Intersection	Road shoulder without a sidewalk	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 10	Northbound	S. Higuera at Suburban	0.29%	0.70%	SLO City	Obstructed by middle front panel of shelter	Sidewalk	No	Yes, 45	5	Intersection	Sidewalk and loading zone≥ 9' wide, Bus Bay	No	For pedestrians using crosswalks	No, 80'
RTA 10	Northbound	N. Thompson at Hwy 101	No Match	No Match	SLO County	No mobility device landing pad	No Sidewalk	No	Yes, 50	2	None	Road shoulder without a sidewalk	Yes: Traffic	Yes, from hill	No, 0'
RTA 10	Southbound	N. Thompson at Hwy 101	No Match	No Match	SLO County	No mobility device landing pad	No Sidewalk	No	Yes, 50	2	None	Road shoulder without a sidewalk	Yes: Traffic, Business Driveway	Yes, from hill	No, 0'

Problem	No mobility device landing pad	No Sidewalk	Near at-grade railroad crossing	High Speed Traffic	Wide pedestrian crossings	No Pedestrian Crossing Opportunity	Inadequate pull-out space	Stopped bus obstructs traffic	Poor sight distance to/from bus stop	Inadequate "No Parking" Zone
Reccomendation	Consider planning mobility device landing pad moving stop, ending service to stop, or maintaining status quo	Consider planning sidewalk, moving stop, ending service to stop, or maintaining status quo	Consider moving stop or ending service to stop, or maintaining status quo	Consider lowering speed limit moving stop, or ending service to stop, or maintaining status quo	Consider narrowing pedestrian street crossing, or moving stop, or ending service to stop, or maintaining status quo	Consider installing pedestrian protected crossing, or moving stop, or ending service to stop, or maintaining status quo	Consider redesigning stop, moving stop, or ending service to stop, or maintaining status quo	Consider redesigning stop, moving stop, or ending service to stop, or maintaining status quo	Consider redesigning stop, moving stop, or ending service to stop, or maintaining status quo	Consider planneig additional "No Parking" space, or redesigning stop, moving stop, or ending service to stop, or maintaining status quo
Problem	**Unsatisfactory Mobility Device Landing Pad**	**Disconnected Sidewalk**								
Reccomendation		Consider planning connecting sidewalk, moving stop, ending service to stop, or maintaining status quo								
Problem	**Obstructed mobility device landing pad**	**Constricted, limited, or cracked sidewalk**								
Reccomendation	Consider removing landing pad obstructions or maintaining status quo	Consider removing obstructions from sidewalks and/or planning sidewalk repair, moving stop, or ending service to stop, or maintaining status quo								

RTA 12/14 Bus Stops without ADA Mobility Device Landing Pads and/or Accessible Connected Throughways - 2013 Assessment

RTA 12/14 Bus Stops without ADA Mobility Device Landing Pads and/or Accessible Connected Throughways - 2013 Assessment

						ADA Accessible Landing Pads & Sidewalks		Pedestrian Crossings				Pull-out Space, Traffic Impact, and Sight Distance			
						Mobility Device Landing Pad	Connected Sidewalk	Railroad X-ing	Speed Limit	# of Lanes	Nearest Crossing	Pull-out space	Bus as Obstruction	Sight Distance	"No Parking"
		Bus Stop Name	PCT of System ONS	PCT of SYSTEM OFFS	Jurisdiction	Are adequate ADA-compliant mobility device landing pads provided?	Sidewalks and Bus Stop Connectivity	Near at-grade railroad crossing?	Posted speed limit 45 mph or above?	Including both sides of road, total auto lanes	Nearest protected pedestrian crossing opportunity within sight	Bus stop pull-out space	Is a stopped bus an obstruction? To what?	Poor sight distance?	Adequate "No Parking Zone"?
RTA 12	Bidirectional	Morro Bay Park	5.64%	4.89%	Morro Bay	No mobility device landing pad, except for busses stopped at shelter	Yes	No	No	2	Intersection	Sidewalk and loading zone≥ 9' wide	Yes: Traffic	No	Yes
RTA 12	Clockwise Loop	10th at Santa Ynez	0.82%	0.97%	SLO County	No mobility device landing pad	Disconnected Sidewalk	No	No, 30	2	None	Road shoulder without a sidewalk	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 43'
RTA 12	Clockwise Loop	Pine at LOVR	0.67%	0.49%	SLO County	No mobility device landing pad	No Sidewalk	No	No	2	None	Road shoulder without a sidewalk	Yes: Traffic	Yes: from hill	No, 0'
RTA 12	Clockwise Loop	Ramona at 7th	0.49%	0.29%	SLO County	No mobility device landing pad	No Sidewalk	No	No	2	Intersection	Road shoulder without a sidewalk	Yes: Traffic	Yes: from hill	No, 0'
RTA 12	Clockwise Loop	Pine at Loma	0.45%	0.31%	SLO County	No mobility device landing pad	No Sidewalk	No	No	2	None	Road shoulder without a sidewalk	Yes: Traffic	No	No, 105' (midblock)
RTA 12	Clockwise Loop	Santa Ysabel at 15th (EB)	0.34%	0.03%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 35	2	Intersection	Road shoulder without a sidewalk	Yes: Traffic, Residential driveway	No	No, 0'
RTA 12	Clockwise Loop	Santa Ysabel at 7th	0.31%	0.10%	SLO County	No mobility device landing pad	Yes	No	No	2	Intersection	Sidewalk & loading zone< 9' wide & curb/log lane < 14' wide	Yes: Traffic	Yes: from hill	No, 0'
RTA 12	Clockwise Loop	11th at Ramona	0.30%	0.52%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 35	2	None	Road shoulder without a sidewalk	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 12	Clockwise Loop	11th at El Morro	0.29%	0.55%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 35	2	Intersection	Road shoulder without a sidewalk	Yes: Traffic, Parked vehicle(s)	For pedestrians using crosswalks; For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 12	Clockwise Loop	7th at El Morro	0.24%	0.17%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 35	2	None	Road shoulder without a sidewalk	Yes: Traffic, Residential driveway	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 12	Clockwise Loop	2nd at Santa Maria	0.22%	0.18%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 25	2	None	Road shoulder without a sidewalk	Yes: Traffic, Residential driveway	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 12	Northbound	South Bay at Quintana	0.19%	0.13%	Morro Bay	Yes	No Sidewalk	No	No, 40	2	None	Road shoulder without a sidewalk, Bus Bay	No	Yes: from curve	No, 60'
RTA 12	Clockwise Loop	Santa Ysabel at 15th (WB)	0.15%	0.42%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 35	2	Intersection	Road shoulder without a sidewalk	No	For pedestrians using crosswalks	No, 0'
RTA 12/14	Souuthbound	Kansas at Hwy 1	0.14%	0.06%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 35	2	None	Road shoulder without a sidewalk	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 12	Southbound	South Bay at Quintana	0.03%	0.04%	Morro Bay	Yes	No Sidewalk	No	No, 40	2	None	Road shoulder without a sidewalk, Bus Bay	No	Yes: from curve	No, 55'
RTA 12/14	Northbound	CA Men's Colony	0.00%	0.01%	CA Men's Colony	Yes, if parking spaces removed	Yes	No	No	1	None	Sidewalk & loading zone< 9' wide & curb/log lane < 14' wide	Yes: Traffic, Parked vehicle(s)	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'

Problem	No mobility device landing pad	No Sidewalk	Near at-grade railroad crossing	High Speed Traffic	Wide pedestrian crossings	No Pedestrian Crossing Opportunity	Inadequate pull-out space	Stopped bus obstructs traffic	Poor sight distance to/from bus stop	Inadequate "No Parking" Zone
Reccomendation	Consider planning mobility device landing pad, moving stop, ending service to stop, o maintaining status quo	Consider planning sidewalk, moving stop, ending service to stop, or maintaining status quo	Consider moving stop or ending service to stop, or maintaining status quo	Consider lowering speed limit, moving stop, or ending service to stop, or maintaining status quo	Consider narrowing pedestrian street crossing, or moving stop, or ending service to stop, or maintaining status quo	Consider installing pedestrian protected crossing, or moving stop, or ending service to stop, or maintaining status quo	Consider redesigning stop, moving stop, or ending service to stop, or maintaining status quo	Consider redesigning stop, moving stop, or ending service to stop, or maintaining status quo	Consider redesigning stop, moving stop, or ending service to stop, or maintaining status quo	Consider planning additional 'No Parking' space, or redesigning stop, moving stop, or ending service to stop, or maintaining status quo
Problem	**Unsatisfactory Mobility Device Landing Pad**	**Disconnected Sidewalk**								
Reccomendation		Consider planning connecting sidewalk, moving stop, ending service to stop, or maintaining status quo								
Problem	**Obstructed mobility device landing pad**	**Constricted, limited, or cracked sidewalk**								
Reccomendation	Consider removing landing pad obstructions or maintaining status quo	Consider removing obstructions from sidewalks and/or planning sidewalk repair, moving stop, or ending service to stop, or maintaining status quo								

RTA 15 Bus Stops without ADA Mobility Device Landing Pads and/or Accessible Connected Throughways - 2013 Assessment

RTA 15 Bus Stops without ADA Mobility Device Landing Pads and/or Accessible Connected Throughways 2013 Assessment

						ADA Accessible Landing Pads & Sidewalks		Pedestrian Crossings				Pull-out Space, Traffic Impact, and Sight Distance			
						Mobility Device Landing Pad	Connected Sidewalk	Railroad X-ing	Speed Limit	# of Lanes	Nearest Crossing	Pull-out space	Bus as Obstruction	Sight Distance	"No Parking"
		Bus Stop Name	PCT of System ONS	PCT of SYSTEM OFFS	Jurisdiction	Are adequate ADA-compliant mobility device landing pads provided?	Sidewalks and Bus Stop Connectivity	Near at-grade railroad crossing?	Posted speed limit 45 mph or above?	Including both sides of road, total auto lanes	Nearest protected pedestrian crossing opportunity within sight	Bus stop pull-out space	Is a stopped bus an obstruction? To what?	Poor sight distance?	Adequate "No Parking Zone"?
RTA 15	Bidirectional	MORRO BAY PARK	5.64%	4.89%	Morro Bay	No mobility device landing pad, except for busses stopped at shelter	Yes	No	No	2	Intersection	Sidewalk and loading zone ≥ 9' wide	Yes: Traffic	No	Yes
RTA 15	Southbound	BURTON @ ARDATH	0.17%	0.00%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 30	2	None	Sidewalk & loading zone < 9' wide & curb/fog lane < 14' wide	Yes: Traffic	No	No, 0'
RTA 15	Southbound	OCEAN @ CAYUCOS PIER (SB)	0.12%	0.08%	SLO County	No mobility device landing pad	No Sidewalk	No	No	2	Intersection	Road shoulder without a sidewalk	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 15	Southbound	OCEAN @ 9TH (SB)	0.12%	0.01%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 35	2	None	Road shoulder without a sidewalk	Yes: Traffic, Business Driveway	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 15	Southbound	HWY 1 @ SAN JACINTO	0.10%	0.06%	Morro Bay	No mobility device landing pad	Yes	No	Yes, 55	5	Intersection	Sidewalk and loading zone ≥ 9' wide, Bus Bay	No	No	No, 0'
RTA 15	Southbound	OCEAN @ 3RD (SB)	0.10%	0.03%	SLO County	No mobility device landing pad	No Sidewalk	No	No	2	Intersection	Road shoulder without a sidewalk	No	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 15	Northbound	CAYUCOS @ ASH (NB)	0.08%	0.03%	SLO County	No mobility device landing pad	No Sidewalk	No	No	2	Intersection	Road shoulder without a sidewalk	No	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 15	Southbound	ARDATH @ HWY 1	0.08%	0.00%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 30	2	None	Road shoulder without a sidewalk	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 15	Southbound	Not in printed schedule "MAIN @ ARLINGTON"	0.07%	0.00%	SLO County	No mobility device landing pad	Yes	No	No	2	Intersection	Sidewalk and loading zone ≥ 9' wide	Yes: Crosswalk	For pedestrians using crosswalks; For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 41'
RTA 15	Southbound	BURTON @ CAMBRIA PINES LODGE	0.06%	0.00%	SLO County	No mobility device landing pad	No Sidewalk	No	No	2	None	Road shoulder without a sidewalk	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 15	Southbound	MOONSTONE @ WINDSOR	0.06%	0.00%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 35	2	None	Road shoulder without a sidewalk	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 15	Southbound	SOUTH OCEAN @ OLD CREEK	0.04%	0.05%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 25	2	None	Road shoulder without a sidewalk, Bus Bay	No	No	No, 0'
RTA 15	Northbound	Not on printed schedule "MAIN @ SKATE PARK	0.03%	0.07%	SLO County	No mobility device landing pad	No Sidewalk	No	No	3	Intersection	Road shoulder without a sidewalk	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 15	Southbound	MAIN @ VETS HALL	0.03%	0.00%	SLO County	No mobility device landing pad	Yes	No	No	3	Intersection	Sidewalk and loading zone ≥ 9' wide	Yes: Traffic, Business Driveway	For traffic entering roadway from cross-streets, driveways, or parking spaces	Yes
RTA 15	Northbound	Not on printed schedule "BURTON @ YORKSHIRE"	0.02%	0.05%	SLO County	No mobility device landing pad	No Sidewalk	No	No	2	None	Road shoulder without a sidewalk	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 15	Northbound	MOONSTONE @ WINDSOR	0.01%	0.10%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 35	2	None	Road shoulder without a sidewalk	Yes: Traffic	Yes: from curve	No, 0'
RTA 15	Northbound	ARDATH @ HWY 1	0.01%	0.04%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 30	2	None	Road shoulder without a sidewalk	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 15	Northbound	BURTON @ ARDATH	0.00%	0.18%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 30	2	None	Sidewalk & loading zone < 9' wide & curb/fog lane < 14' wide	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 15	Northbound	BURTON @ MAIN ST.	0.00%	0.16%	SLO County	No mobility device landing pad	Yes	No	No	2	Intersection	Sidewalk and loading zone ≥ 9' wide	Yes: Traffic, Business Driveway	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 37'
RTA 15	Northbound	OCEAN @ 8TH (NB)	0.00%	0.07%	SLO County	No mobility device landing pad	No Sidewalk	No	No	2	None	Road shoulder without a sidewalk	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 15	Northbound	OCEAN @ 3RD (NB)	0.00%	0.06%	SLO County	No mobility device landing pad	Yes	No	No, 35	2	Intersection	Sidewalk and loading zone ≥ 9' wide	Yes: Business driveway	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 35'
RTA 15	Northbound	Not on printed schedule "MAIN @ TAMSON (NB)"	0.00%	0.04%	SLO County	No mobility device landing pad	Yes	No	No	3	None	Sidewalk & loading zone < 9' wide & curb/fog lane < 14' wide	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 15	Northbound	CASTILLO @ OTTER (NB ONLY)	0.00%	0.03%	SLO County	No mobility device landing pad	Yes	No	No	2	None	Sidewalk and loading zone ≥ 9' wide	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 15	Southbound	MOONSTONE @ SAN SIMEON PINES LODGE	0.00%	0.03%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 25	2	None	Road shoulder without a sidewalk	Yes: Traffic	Yes: from curve	No, 0'
RTA 15	Northbound	SOUTH OCEAN @ OLD CREEK	0.00%	0.02%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 25	2	None	Road shoulder without a sidewalk	Yes: Traffic	Yes: from curve	No, 0'
RTA 15	Northbound	No on printed schedule "MAIN @ CORNWALL"	0.00%	0.01%	SLO County	Obstructed "Old Store Station" bench, Stop obstructed by parking	Yes	No	No	2	Mid-block crosswalk	Sidewalk and loading zone ≥ 9' wide	Yes: Traffic, Business Driveway	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 15	Northbound	Not on printed schedule: "MOONSTONE @ FIRESIDE INN"	0.00%	0.00%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 25	2	None	Road shoulder without a sidewalk	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 15	Southbound	Not in printed schedule "MOONSTONE @ MARINERS INN (SB)"	0.00%	0.00%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 25	2	None	Road shoulder without a sidewalk	Yes: Traffic, Parked vehicle(s)	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 15	Northbound	Not on printed schedule "MOONSTONE @ MARINERS INN (NB)"	0.00%	0.00%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 25	2	None	Road shoulder without a sidewalk, Bus Bay	No	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 15	Northbound	MAIN @ BLUEBIRD INN	0.00%	0.00%	SLO County	No mobility device landing pad	No Sidewalk	No	No	2	Mid-block crosswalk	Sidewalk & loading zone < 9' wide & curb/fog lane < 14' wide, Bus Bulb	Yes: Traffic	No	No, 0'
RTA 15	Southbound	Not on printed schedule: "MOONSTONE @ CASTLE INN"	0.00%	0.00%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 25	2	None	Road shoulder without a sidewalk	Yes: Parked vehicle(s)	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 15	Southbound	BURTON @ BURTON CIR.	No Match	No Match	SLO County	No mobility device landing pad	No Sidewalk	No	No	2	None	Road shoulder without a sidewalk	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	Yes

Problem	No mobility device landing pad	No Sidewalk	Near at-grade railroad crossing	High Speed Traffic	Wide pedestrian crossings	No Pedestrian Crossing Opportunity	Inadequate pull-out space	Stopped bus obstructs traffic	Poor sight distance to/from bus stop	Inadequate "No Parking" Zone
Reccomendation	Consider planning mobility device landing pad, moving stop, ending service to stop, or maintaining status quo	Consider planning sidewalk, moving stop, ending service to stop, or maintaining status quo	Consider moving stop or ending service to stop, or maintaining status quo	Consider lowering speed limit, moving stop, or ending service to stop, or maintaining status quo	Consider narrowing pedestrian street crossing, or moving stop, or ending service to stop, or maintaining status quo	Consider installing pedestrian protected crossing, or moving stop, or ending service to stop, or maintaining status quo	Consider redesigning stop, moving stop, or ending service to stop, or maintaining status quo	Consider redesigning stop, moving stop, or ending service to stop, or maintaining status quo	Consider redesigning stop, moving stop, or ending service to stop, or maintaining status quo	Consider planning additional "No Parking" space, or redesigning stop, moving stop, or ending service to stop, or maintaining status quo

Problem	Unsatisfactory Mobility Device Landing Pad	Disconnected Sidewalk
Reccomendation		Consider planning connecting sidewalk, moving stop, ending service to stop, or maintaining status quo

Problem	Obstructed mobility device landing pad	Constricted, limited, or cracked sidewalk
Reccomendation	Consider removing landing pad obstructions or maintaining status quo	Consider removing obstructions from sidewalks and/or planning sidewalk repair, moving stop, or ending service to stop, or maintaining status quo

APPENDIX C: Bus Stop Photo Catalog

A comprehensive bus stop photo catalog has been created for all stops surveyed. Please contact RTA for more information.

APPENDIX B: Draft Prioritizing RTA and Paso Express Fixed-route Bus Stop Improvements Report

Prioritizing RTA & Paso Express Fixed-route Bus Stop Improvements

RTA Mission

The Mission of RTA is to provide safe, reliable and efficient transportation services that improve and enhance the quality of life for the citizens and visitors of San Luis Obispo County.

Goal

Develop a plan to make every fixed-route bus stop served by RTA and Paso Express ADA accessible, safe, convenient and comfortable for citizens and visitors of all ages and abilities, including those who use mobility devices like wheelchairs, scooters, rolling luggage, and strollers.

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Executive Summary

To further develop a safe, reliable, and efficient transit-centric transportation system in the greater San Luis Obispo area, this report seeks to prioritize RTA and Paso Express fixed-route bus stop improvements. It is the goal of this report to ensure that, to the extent possible, every bus stop served by an RTA or Paso Express fixed-route bus is ADA accessible, safe, convenient, and comfortable for citizens and visitors of all ages and abilities, including those who use mobility devices like wheelchairs, scooters, rolling luggage, and strollers.

This report discusses existing conditions at RTA and Paso Express bus stops and presents some potential improvement options. The analysis considers safety, long-term locations, minimum ADA access requirements, access to nearby activity centers exceeding minimum ADA requirements, passenger amenities, pedestrian connections, traffic impacts, sight distance, and bus pull-out space. The report also evaluates passenger utilization by route at each bus stop, and high-use and infrequently used bus stops are categorized to help prioritize potential improvements based on demand.

Local decision-makers should keep in mind that optimal solutions, including bus stop related improvements, depend on context. Optimal bus stop location and design solutions require local jurisdictions to consider how the environment surrounding each bus stop affects the attractiveness of using public transportation. For example, passenger amenities (bench, shade, etc.) may already exist immediately adjacent to a bus stop in an urban setting, yet it might be appropriate to add ambient lighting and a passenger shelter in a rural setting. In addition, transit user characteristics (e.g., people with disabilities, seniors, mothers with young children, homeless persons, business travelers, vacationers, cyclists, etc...) may dictate that local jurisdictions consider expanded passenger amenities to attract riders. Local land uses and traffic patterns can also affect optimal bus stop placement and design. Existing nearby public amenities like shelter, seating, lighting, trash receptacles, and/or bike parking effect optimal bus stop design.

Additionally, when considering potential bus stop improvements, local decision-makers must consider financial feasibility and cost–effectiveness of potential solutions. It would be unwise to attempt to implement costly and complex urban solutions (e.g., a concrete bus pull-out, passenger shelter, and bus arrival prediction signs) at a rural bus stop that would have little chance of attracting a sufficient number of riders to justify the cost. In any case, RTA and the local officials should seek robust community input when prioritizing bus stop improvements in any given community.

To identify existing conditions, every bus stop served by RTA was inventoried by an RTA employee from June 2013 through ~~October 2013~~ September 2014. This report includes tables that summarize key findings for each fixed-route.

Key Findings

RTA High-Use Stops

- Over ~~75%~~ 55% of RTA fixed-route boardings and alightings occur at less than ~~20%~~ 10% of bus stops served by RTA.
- Of the approximately ~~125~~ 220 bus stops currently served by an RTA operated fixed-route, ~~21~~ 20 are considered high-use bus stops. High-use bus stops are defined as has having more than 1% of system-wide boardings or alightings.
- Of the five high-use multi-route transit hubs served by RTA and other fixed-route providers, three permit multiple buses to board and alight passengers simultaneously. However, only one ADA compliant landing pad is present at the **Pismo Premium Outlets** and **Morro Bay Park** passenger facilities.
- **Santa Rosa @ Mustang Village & Stenner Glen Apartments** is the only high-use RTA stop used primarily for boarding that has no amenities for waiting passengers (e.g., no shelter and no seating).
- Of the ~~21~~ 20 high-use RTA stops: 7 do not have RTA bus stop signs, 2 do not have RTA information kiosks, and 13 do not have Braille pads. Only nine have bike racks. Three do not have trash receptacles.

ADA Compliance & Safe and Accessible Pathways

- To meet minimum ADA requirements, fixed-route bus stops must have a mobility device landing pad that is a firm and stable surface at least 5' wide by 8' deep (with no greater than a 2% slope) that connects to an accessible route.
- Of the approximately ~~125~~ 220 bus stops served by RTA and Paso Express fixed-routes, ~~77~~ 111 bus stops (greater than ~~60%~~ 45%) lack an acceptable mobility device landing pad.

- A total of ~~49~~ 61 bus stops served by RTA or Paso Express fixed-routes do not connect to nearby sidewalks.
- Regarding safe pedestrian crossings, out of the ~~77~~ 104 ADA non-compliant bus stops, 2 are adjacent to an at-grade railroad crossing, ~~10~~ 19 are adjacent to streets with speed limits greater than 45 mph or greater, ~~3~~ 14 are adjacent to roadways with 4 or more lanes, and ~~38~~ 49 do not have a labeled pedestrian crossing within sight. Obviously, RTA fixed-routes operate on many corridors with 45 mph or greater speed limits and no feasible adjacent travel options. As such, RTA must work closely with local jurisdictions when considering the placement of and improvements to bus stops. Nonetheless, transit authorities have been held liable for incidents involving transit users crossing busy streets while accessing bus stops that the agency knew or should have known caused their riders to face unacceptable risks. The Darlene Bonanno v. Central Contra Costa Transit Authority case is discussed in this report.

Phase I: Analyzing Bus Stops

For RTA to offer ADA accessible, safe, convenient and comfortable fixed-route transit services to users and residents of all ages and abilities, riders should be able to safely access all fixed-route bus stops and safely board and alight at every fixed-route bus stop. To access the bus stop safely, mobility device users require a safe and accessible pathway (ideally, a sidewalk separated from rail, high-speed automobile, and bicycle traffic) that connects the bus stop to surrounding transit trip generators. To safely board and alight a bus, mobility device users require an ADA compliant mobility device landing pad at least five feet wide and eight feet deep positioned adjacent to the front door of a stopped bus.

Prior to investing in fixed-route bus stop improvements (i.e., mobility device landing pads with safe and accessible pathways to local developments), RTA and local jurisdiction officials must evaluate existing conditions at the bus stop and develop a realistic improvement plan.

Minimum ADA Requirements:

Minimum ADA requirements for bus stops according to *ADA Accessibility Guidelines for Buildings and Facilities* (ADAAG) Section 10 are below[1]:

> **Minimum ADA Requirements**
>
> Providing accessible bus stops requires choosing appropriate locations or improving the existing location. Coordination and cooperation with public works agencies, municipal government and business owners can enhance the connectivity between the land use and the bus stop. To ensure optimum bus stop placement, coordination should occur during the planning/development phase.
>
> Bus stop sites must have the following:
>
> - A firm, stable surface;
> - A minimum clear length of 96 inches (eight feet), measured from the curb or vehicle roadway edge and a minimum clear width of 60 inches (five feet), measured parallel to the vehicle roadway;
> - A maximum slope of 1:50 (2%) for water drainage; and
> - Connection to streets, sidewalks or pedestrian paths by an accessible route.

Minimum dimensions of a mobility device landing pad

Safe and Accessible Pedestrian Crossings

The provision of accessible and safe pedestrian crossings that connect bus stops to nearby pedestrian paths of travel is essential to ensure transit user safety. Factors like proximity to railroad crossings, speed limits on adjacent streets, width of adjacent roadways and proximity to protected pedestrian crossings are important to transit user safety.

Transit authorities have been held liable for passenger incidents involving transit users crossing streets to access bus stops. For example, in 1993, while on her way to a bus stop, Darlene Bonanno entered a crosswalk at a 3-leg intersection that had no traffic controls for through traffic, and she was struck by a car and seriously injured. Ms. Bonanno sued the driver of the car that struck her, as well as the Central Contra Costa Transit Authority (CCCTA), Contra Costa County, and entities that treated her after the accident. In 1999, the Supreme Court of California found CCCTA and Contra Costa County each 1% liable. All parties except for CCCTA settled outside of court. CCCTA was ultimately held liable for over $1.5 million dollars.[3]

Prior to Ms. Bonanno being struck, there were indicators that accessing this particular bus stop was hazardous. In 1986, on her way to the same bus stop and crossing the same street (although midblock, not at the intersection) as Ms. Bonanno, Kimberly Chittock was struck by a car and killed. In 1987, 15 students complained that it was too dangerous to cross the same street to access the same bus stop. Later in 1987, Contra Costa County installed traffic signals with pedestrian push buttons at an intersection about 500 feet away from the bus stop. Although

pedestrians could now cross the street safely, the route to the bus stop was still hazardous, since it was not relocated to better access the safe street crossing.[3]

Safe crossings for transit users should be considered when developing a transit bus stop improvement plan.

Traffic Impact, Sight Distance, Pull-Out Space, and Safety

Ideally, a stopped bus does not unduly obstruct traffic or impair sight distance for nearby pedestrians or drivers. An ideal bus stop also affords space that allows buses to easily enter the bus-loading zone while decelerating, stop parallel to the bus-loading zone, and safely accelerate when exiting the bus-loading zone. Additionally, an ideal bus stop provides ample space around a parked bus for passengers to safely enter and exit the stop and/or load or remove bikes from racks. It is also important for busses to be able to adequately reenter traffic after servicing a bus stop. Obviously, it would not be feasible – or even advisable – to provide a bus pull-out at every bus stop in San Luis Obispo County. Furthermore, in many instance, a bus bulb may be preferable to a bus pull-out. Local decision-makers must decide if the surrounding uses, traffic levels, sight-lines, etc. warrant such a complex and costly solution.

Bus Stop Location Prioritization and Bus Pull-Out Space

The first step to prioritize bus stop improvements is to determine if current bus stop locations are optimal. Prior to prioritizing bus stop improvements, consensus should be reached by RTA and local jurisdiction officials regarding planned new or improved fixed-route bus stop locations. Factors to consider when identifying, evaluating, and selecting bus stop locations include:

Stop Location Prioritization

- Comfort, and convenience for transit route passengers (e.g., travel time, distance, out of direction travel, and cost)
- Accessibility, safety, comfort, and convenience of bus stops and pathway connections to adjacent developments
- Context sensitivity of bus stop with surrounding environment

Bus Pull-Out Space: Road Operation and Safety

- Effects of stopped bus on adjacent traffic and sight distance
- Ability of bus to decelerate to, stop at, and accelerate from bus stop
- Adequateness of space around stopped busses for transit user safety

Cost of Improvements & Available Funding Sources

RTA does not own any bus stops or adjacent land, so improvements to bus stops and surrounding areas typically requires partnerships with other agencies and/or adjacent property owners. This should be considered when evaluating potential new bus stop locations and estimating improvement costs related to a bus stop (e.g., expected grant availability and expected improvements along the RTA Route 9 in south Atascadero and the RTA Route 10 in Nipomo).

Phase II: Prioritizing Bus Stop Improvements

Once consensus of long-range bus stop locations has been reached by RTA and local jurisdiction officials, the next step is to prioritize stop improvements. This report seeks to prioritize installation of ADA accessible mobility device landing pads, safe and accessible connecting pathways, and passenger amenities that meet transit user needs. Factors to consider when prioritizing bus stop improvements include:

- Presence of mobility device landing pads
- Presence accessible pathways between the bus stop and nearby transit trip generators
- Presence of passenger amenities not required by ADA but are important for generating ridership. These amenities include safe pathways, benches, shelters, lighting, bicycle parking and passenger information
- Proportion of boardings and alightings in relationship to the RTA system as a whole.
- Potential use by school buses and other forms of shared-ride transportation
- Jurisdictional control of the bus stop
- Cost to install ADA mobility device landing pad at stop (if not already provided)
- Cost to install accessible pathways connecting to the bus stop (if not already provided)
- Cost to install amenities not required by ADA

Bus Stop Improvement Prerequisite I: Mobility Device Landing Pad(s)

If a fixed-route bus stop does not have a mobility device landing pad, by ADA requirements, RTA should not implement improvements to the bus stop before one is installed (or planned). Repair, replacement, and updated transit user information are exempt from this recommendation.

Bus Stop Improvement Prerequisite II: Safe and Accessible Pathways

This document defines **safe** and accessible pathways **between the bus stop and nearby transit trip generators** as an RTA bus stop planning prerequisite. It should be noted that ADA only requires a compliant mobility device landing pad that connects to any type of accessible pathway

(e.g., an accessible but busy street). If a fixed-route bus stop is not connected to an accessible pathway, by ADA requirements, no improvements should implemented by RTA to the bus stop before an accessible pathway is installed (or planned).

Amenities to Meet Transit User Needs

On March 3rd, 2010, RTA staff proposed minimum standards for amenities that will create "safe, clean, comfortable, accessible stops with amenities that attract and retain customers" to the RTA Board of Directors. These are the minimum bus stop standards as proposed in 2010:

- All RTA bus stops will include a bus stop sign and information kiosk.
- Bus stops that have at least fifteen (15) boardings per day shall include a bus bench and trash receptacle.
- Bus stops that have at least twenty-five (25) boardings per day shall include a 13-foot passenger shelter with solar lighting or sufficient ambient light and a bike rack or bike locker.
- Bus stops that have at least forty (40) boardings per day shall include a 16-foot passenger shelter with solar lighting or sufficient ambient light and all amenities as noted above.
- New bus stops may also include a passenger shelter based upon the local jurisdiction requirements for new commercial or residential development in the corridor.
- RTA staff will work with local jurisdiction staff to incorporate local design requirements and develop a process for providing conditions to new commercial or residential development in the corridor.
- RTA staff will also work with the local arts councils on the development of an "Arts@Stops" program where local artists could incorporate their artwork at bus stops, as appropriate.

Re-evaluating these standards may be a worthwhile exercise. Factors to consider when prioritizing bus stops amenities include:

- Presence of bus stop sign and information kiosk.
- Presence of other amenities (e.g. seating, shelter, bike storage, trash, Braille pads).
- Passenger boarding proportion ranking (boarding passengers typically wait at stops, while alighting passengers rarely dwell at a bus stop).
- Typical wait times of users at bus stops.
- Travel characteristics of transit users at bus stops (e.g., mobility device users, people with disabilities, cyclists, etc.).
- Environment surrounding bus stop (e.g., adjacent land use, shelter, shade, lighting, interaction with sun, wind, and water, bike lanes, trash, public art, etc.).
- Number of seats needed at bus stops, based on typical passenger activity.
- Number of bike racks needed at bus stops.

From a purely liability avoidance perspective, implementing new passenger amenities at bus stops should not be considered unless the bus stop meets minimum ADA requirements, especially if new amenities significantly alter the built or natural environment.

Proportion of Boardings and Alightings

The majority of RTA passenger trips are provided during weekday commute hours, so this analysis uses boarding and alighting (on/off) data collected on weekdays to prioritize improvements. If other overarching needs of community members suggest that certain bus stops should receive special consideration, then local officials could alter the priority to meet those needs. For example, construction of a low-income and/or accessible housing project adjacent to a deficient bus stop could warrant special consideration to meet community member needs.

Estimating RTA Bus Stop and Route Usage

To estimate proportion of weekday "ons/offs" for stops served by RTA and Paso Express fixed-routes, ~~a~~ two useful data sources exist:

1) In mid-April 2010, RTA collected "on/off" data over five consecutive weekdays along RTA routes.

2) As part of the 2012 SLOCOG North County Transit Plan[4], during Tuesday May 3 and Wednesday May 4, 2011, Nelson\Nygaard conducted on-board surveys along RTA Route 9, North County Shuttle, and Paso Express routes (to be comparable to the data collected by RTA in 2010, this data has been extrapolated to represent five consecutive weekdays).

This report uses the above-mentioned data sources to calculate percentages of boardings and alightings along each RTA and Paso Express route and at each RTA and Paso Express bus stop in relationship to the entire fixed-route system operated by RTA. This report uses the data collected in 2010 by RTA as the usage data for the RTA routes, and because the RTA Route 9 that became effective on June 1, 2014 serves stops previously served by the North County Shuttle, North County Shuttle usage data collected in 2011 by Nelson\Nygaard has been added to the RTA Route 9 usage data. This report also uses the 2011 Nelson\Nygaard data as the usage data for the Paso Express Routes.

This report also uses the data mentioned above to conclude that, in 2010 and 2011, approximately 11,843 boardings and 11,766 alightings could be expected to have occured on the fixed-route transit system operated by RTA (i.e. RTA and Paso Express) during a typical work, and this assumption is used to calculate the proportion of boardings and alightings for each RTA and Paso Express route and at each RTA and Paso Express bus stop in relationship to the entire fixed-route system operated by RTA .

The tables in **APPENDIX A** show the "on/off" transit user usage data collected for all RTA and Paso Express bus stops and routes. This data was used to create the tables used throughout this report.

RTA Route Usage Proportions

Proportions of passengers per RTA route are summarized in the table below.

Route Proportions After to June 1st, 2014 Configuration

	PCT of System ONS	PCT of System OFFS
RTA 9 Weekdays	34%	35%
RTA 10 Weekdays	26%	26%
RTA 12 Weekdays	26%	25%
Paso Express Weekdays	12%	12%
RTA 15 Weekdays	2%	2%
Total (Check for correctness)	100%	100%

Route Proportions Prior to June 1st, 2014

	PCT of System ONS	PCT of System OFFS
RTA 10 Weekdays	33%	33%
RTA 9 Weekdays	32%	33%
RTA 12 Weekdays	32%	32%
RTA 15 Weekdays	2%	2%
Total (Check for correctness)	100%	100%

RTA High-Use Bus Stops

A table summarizing high use bus stops (i.e., bus stops with greater than 1% of the total RTA system boardings or alightings during the study period) is shown below. Notably, of the approximately ~~125~~ 220 bus stops served by RTA fixed-route buses, over ~~77%~~ 55% of both boardings and alightings take place at the ~~21~~ 20 bus stops listed below.

Where bus stops have moved or been renamed since "on/off" data was collected in 2010 or 2011, names of stops serviced in 2014 nearest the discontinued 2010/11 stops are indicated in parentheses.

	PCT of System ONS ≥1%
	PCT of System OFFS ≥1%

High-Use Stops	Ons	Offs
Government Center	19.58%	17.44%
Pine at 8th (North County Transportation Center) (Train Station)	6.48%	6.71%
Cuesta College	5.35%	2.46%
Morro Bay Park	4.48%	3.87%
Atascadero Transit Center	4.37%	5.31%
Cal Poly Kennedy Library (NB)	3.84%	0.96%
Pismo Prime Outlets	3.74%	3.20%
Town Center Mall (Santa Maria Transit Center)	2.89%	2.56%
Halcyon Park and Ride	2.26%	1.70%
Foothill @ Casa (NB) (Santa Rosa @ Mustang Village @ Stnr Glen Apts.)	2.15%	0.22%
Las Tablas Park and Ride	1.82%	1.67%
E. Grand @ El Camino Real	1.52%	2.15%
Alan Hancock College (S. Bradley at Jones)	1.48%	1.82%
Tefft St. @ Carillo St. (NB)	1.38%	0.67%
ECR at Hwy 1 (Carwash)	1.10%	0.18%
Cal Poly Kennedy Library (SB)	0.07%	1.74%
Cal Poly Performing Arts Center (SB)	0.06%	1.61%
Spring at 34th (SB)	0.25%	1.47%
Foothill @ Casa (SB) (Santa Rosa @ Foothill)	0.08%	1.42%
Monterey @ Grand	0.02%	1.11%
Total	**62.93%**	**58.27%**

Transit users typically spend more time at the bus stop when boarding because they wait at the bus stop for the bus to arrive; alighting passengers typically leave the bus stop upon exiting the bus (unless they are waiting to transfer to another bus or waiting to be picked up by a friend or relative). Transit user wait time and appropriate bus stop waiting amenities should be taken into consideration when planning and prioritizing bus stop improvements based on passenger activity.

Existing amenities beyond minimum ADA requirements for high use stops are shown in the table in APPENDIX A.

RTA Infrequently Used Bus Stops

A table summarizing infrequently used bus stops (i.e., bus stops with no recorded boardings or alightings during the study period) is presented below.

Unused Stops	ON	OFF
Moonstone @ Castle Inn	0	0
Moonstone @ Mariner's Inn (SB)	0	0
Main @ Jamaica	0	0
Main @ Bluebird Inn	0	0
Moonstone @ Mariner's Inn (NB)	0	0
Moonstone @ Firesiede Inn	0	0
Rambouillet at Nicklaus	0	0
Rambouillet at Wade	0	0

RTA staff recommends considering ending service to these bus stops.

Assessment of RTA Multi-route Transit Hubs

RTA Multi-Route Transit Passenger Facilities: Existing Amenities at High-Use Bus Stops

Of the 20 high-use bus stops listed in the previous section, ~~5~~ 6 are served by multiple RTA fixed-routes, as follows:

- **Government Center** is served by RTA Route 9, RTA Route 10, and RTA Routes 12/14.
- The **North County Transportation Center** is served by RTA Route 9 and the Paso Express
- **Morro Bay Park** is served by RTA Route 12 and RTA Route 15.
- **Cal Poly Kennedy Library NB** is served by RTA Route 9NB, RTA Route 12NB and RTA Route 10x.
- **Santa Rosa at Mustang Village & Stenner Glen Apartments** is served by RTA Route 9NB and RTA Route 12/14NB.
- **Santa Rosa at Foothill** is served by RTA Route 9SB and RTA Route 12/14SB.

The table in APPENDIX A summarizes amenities and limitations at these high-use multi-route transit passenger facilities served by RTA:

- The **Santa Rosa at Mustang Village** bus stop is the only high-use bus stop that lacks amenities for waiting passengers (i.e., no shelter and no seating).
- All six high-use passenger facilities have at least one ADA compliant mobility device landing pad and safe and accessible sidewalks and/or routes connecting the bus stop to nearby developments.
- At **Pismo Premium Outlets** and **Morro Bay Park** high-use passenger facilities, multiple buses stop simultaneously, but only one ADA compliant landing pad is present. These high-use passenger facilities lack sufficient space to simultaneously board or alight mobility devices from more than one bus at a time.

- **Cal Poly Kennedy Library NB** is the only high-use passenger facility that lacks an RTA bus stop sign.

- All ~~five~~ six high-use passenger facilities have RTA information kiosks.

- All ~~five~~ six high-use passenger facilities have sufficient lighting.

- Only the **North County Transportation Center, Government Center** and **Morro Bay Park** high-use passenger facilities have bike racks.

- Only **Cal Poly Kennedy Library NB** and **Santa Rosa at Foothill** high-use passenger facilities are directly connected to designated bike lanes.

- **Government Center** is the only high-use passenger facility with a Braille pad.

- **Santa Rosa at Mustang Village** and **Santa Rosa at Foothill** are the only high-use passenger facilities without a trash receptacle.

Existing amenities at high-use bus stops served by single RTA routes are discussed in the next sections.

Assessment of RTA Route 9

RTA Route 9 Bus Stop Usage: Proportion of Boardings and Alightings

RTA Route 9 Weekdays Southbound

9 Weekday Southbound WEEKDAY TOTALS (After June 1st, 2014)	TOTAL		Total Stop Activity	PCT of System ONS	PCT of System OFFS
	ON	OFF			
Pine at 8th	455	115	569	3.84%	0.97%
Atascadero Transit Center	450	69	519	3.80%	0.58%
Las Tablas Park and Ride	198	16	214	1.67%	0.13%
ECR at Hwy 41 (Carwash)	131	21	152	1.10%	0.18%
ECR at Encina	86	62	148	0.73%	0.53%
ECR at Encina	86	62	148	0.73%	0.53%
ECR at El Bordo (Post Office)	72	31	103	0.61%	0.26%
Viejo Camino at Bocina	59	53	112	0.50%	0.45%
ECR at Maple	48	23	71	0.41%	0.20%
Mission at 14th	44	0	44	0.37%	0.00%
ECR at Plata (Glen Oaks Plaza)	41	15	56	0.35%	0.12%
ECR at Patria Circle	29	15	44	0.24%	0.13%
Target Shopping Center	28	18	45	0.23%	0.15%
ECR at Rosario	25	3	28	0.21%	0.02%
Viejo Camino at Santa Barbara	23	13	36	0.19%	0.11%
ECR at Del Rio (Mission Oaks Plaza)	23	10	33	0.19%	0.08%
ECR at Pueblo	17	18	35	0.14%	0.15%
ECR at San Benito	15	13	28	0.13%	0.11%
ECR at Entrada	15	13	28	0.13%	0.11%
Twin Cities Hospital	15	5	20	0.13%	0.04%
ECR at Cynthia (Kennedy Club)	13	3	15	0.11%	0.02%
ECR at Santa Rosa (Miner's Hardware)	10	3	13	0.08%	0.02%
ECR at Santa Margarita (County Care)	9	7	16	0.08%	0.06%
Cal Poly Library (SB)	8	205	213	0.07%	1.74%
ECR at San Anselmo (Lutheran Church)	8	5	13	0.06%	0.04%
ECR at Curbaril (Albertson's)	8	5	13	0.06%	0.04%
ECR at Del Rio (Mission Oaks Plaza)	8	0	8	0.06%	0.00%
Cal Poly PAC (SB)	7	189	196	0.06%	1.61%
ECR at Maria	6	11	17	0.05%	0.09%
Cuesta College North	5	113	118	0.04%	0.96%
Foothill at Casa (SB) (Santa Rosa at Foothill)	5	65	70	0.04%	0.55%
Main at 6th (no longer served)	5	20	25	0.04%	0.17%
ECR at Carmel	5	7	12	0.04%	0.06%
Main at 1st (no longer served)	5	5	10	0.04%	0.04%
Creston @ Melody	5	0	5	0.04%	0.00%
Paloma Park (no longer served)	5	0	5	0.04%	0.00%
ECR at Pine (Garden Farms)	3	10	13	0.03%	0.08%
ECR at Viejo Camino (no longer served)	3	8	11	0.03%	0.07%
ECR at Atalaya	3	13	15	0.02%	0.11%
Las Tablas at Posada (no longer served)	3	8	10	0.02%	0.06%
ECR at San Anselmo (Kmart)	3	5	8	0.02%	0.04%
Monterey at Grand	2	131	133	0.02%	1.11%
Government Center	0	603	603	0.00%	5.12%
ECR at Santa Cruz (no longer served)	0	15	15	0.00%	0.13%
Spring at 4th	0	10	10	0.00%	0.08%
Spring at 6th (no longer served)	0	3	3	0.00%	0.02%
	1983	2011.5	3995	17%	17%

RTA Route 9 Weekdays Northbound

9 Weekday Northbound WEEKDAY TOTALS (After June 1st, 2014)	TOTAL		Total Stop Activity	PCT of System ONS	PCT of System OFFS
	ON	OFF			
Government Center	780	0	780	6.59%	0.00%
Cal Poly Library (NB)	239	30	269	2.02%	0.25%
Pine at 8th	168	500	668	1.42%	4.25%
Cal Poly Pac (NB)	106	12	118	0.90%	0.10%
Cuesta College North	95	0	95	0.80%	0.00%
Atascadero Transit Center	68	381	449	0.57%	3.23%
Viejo Camino at Bocina (Bordeaux Apts)	63	109	172	0.53%	0.93%
Monterey at Peach Tree Inn	56	5	61	0.47%	0.04%
ECR at Encina	50	69	119	0.42%	0.59%
Foothill at Casa (NB) (Santa Roas at Mstng / Stnr Glen)	39	6	45	0.33%	0.05%
Theatre at Theatre	35	20	55	0.30%	0.17%
ECR at Palomar	32	61	93	0.27%	0.51%
ECR at Vons	29	153	182	0.24%	1.30%
ECR at Avenida Maria	29	95	124	0.24%	0.81%
ECR at Traffic Way	25	45	70	0.21%	0.38%
ECR at Musselman	20	51	71	0.17%	0.43%
ECR at Del Rio (Mission Oaks)	20	8	28	0.17%	0.06%
ECR at Atalaya	20	3	23	0.17%	0.02%
Las Tablas at Posada (no longer served)	18	15	33	0.15%	0.13%
ECR at San Anselmo (Kmart)	18	13	30	0.15%	0.11%
Las Tablas Park and Ride	17	182	199	0.14%	1.54%
ECR at El Bordo (Post Office)	15	54	69	0.13%	0.45%
Spring at 2nd	15	0	15	0.13%	0.00%
ECR at Solano	14	29	43	0.12%	0.25%
ECR at Santa Rosa	13	12	25	0.11%	0.10%
Main at 1st (no longer served)	13	15	28	0.11%	0.13%
Main at 6th (no longer served)	13	8	20	0.11%	0.06%
ECR at San Benito	10	8	18	0.08%	0.06%
ECR at Pueblo	10	32	42	0.08%	0.27%
ECR at Santa Margarita (County Care)	8	8	16	0.07%	0.07%
Twin Cities Hospital	8	23	30	0.06%	0.19%
ECR at San Jacinto	8	15	23	0.06%	0.13%
ECR at Maya (Kennedy Club)	8	8	15	0.06%	0.06%
ECR at Santa Cruz	8	3	10	0.06%	0.02%
Spring at 5th	8	0	8	0.06%	0.00%
ECR at Maria	7	12	19	0.06%	0.10%
ECR at Pine (Garden Farms)	6	6	12	0.05%	0.05%
Viejo Camino at Santa Barbara	2	11	13	0.02%	0.09%
ECR at Viejo Camino (no longer served)	1	8	9	0.01%	0.07%
Paloma Park (no longer served)	0	50	50	0.00%	0.42%
Mission at 14th Street	0	25	25	0.00%	0.21%
ECR at Carmel	0	6	6	0.00%	0.05%
ECR at Rosario	0	5	5	0.00%	0.04%
South Vine at 1st (Gateway Center)	0	0	0	0.00%	0.00%
	2089	2089	4178	18%	18%

RTA Route 9 Bus Stop Prerequisite Inventory Summary

A table in APPENDIX B provides a summary of bus stops served by RTA Route 9 that lack ADA accessible mobility device landing pads and/or safe and accessible pathways. Corresponding proportions of RTA system boardings and alightings are also presented for each of these bus stops. The table in APPENDIX B identifies improvement opportunities associated with these bus stops and provides staff recommendations for next steps to create a bus stop improvement plan.

RTA Route 9 High Priority Recommendation:

Remove landing pad obstructions: Mobility device landing pads at three relatively safe and accessible bus stops **(Cal Poly Kennedy Library NB, Cal Poly Performing Arts SB,** and **ECR at Encina NB)** exist but are obstructed by bus stop amenities.

RTA staff recommends removing obstructions to create ADA compliant landing pads all three of these stops.

RTA Route 9 Bus Stop Prerequisites: Mobility Device Landing Pads with Safe and Accessible Pathway Connections

Of the 80 RTA Route 9 bus stops, 17 lack ADA accessible landing pads, so they are not ADA compliant. 16 RTA Route 9 bus stops lack connected sidewalks. Six bus stops without landing pads are under San Luis Obispo County's jurisdiction, and all are found along El Camino Real and Santa Barbara Road from Maria Avenue in Santa Margarita to Bordeaux Apartments in South Atascadero. Four bus stops without landing pads are under Atascadero jurisdiction, and they are all in north Atascadero. Two bus stops without landing pads are under San Luis Obispo City jurisdiction. There are five RTA 9 bus stops without landing pads under Paso Robles Jurisdiction.

Six RTA Route 9 ADA compliant stops under San Luis Obispo County jurisdiction found in Santa Margarita and South Atascadero have landing pads, but no connecting sidewalks.

RTA Route 9 Pedestrian Crossings

At all six of the ADA non-compliant bus stops under San Luis Obispo County jurisdiction in Santa Margarita and South Atascadero, the speed limit of the adjacent street is 45 miles per hour or higher, and at five of the six stops, the speed limit of the adjacent street is 55 miles per hour. Roadway widths are two to three lanes. None of these six bus stops have a protected pedestrian crossing within sight. Of these six bus stops, two are near an at-grade railroad crossing. Given the rural nature of these stops, installing pedestrian protection features like those typically found in urban settings is not feasible nor advisable at this time. If development patterns change, or if local officials become aware of undue hazards, RTA should work with local officials to potentially relocate these bus stops.

All four of the ADA non-compliant bus stops under Atascadero jurisdiction have 45 miles per hour speed limits. One of the ADA non-compliant stops is adjacent to a roadway with five lanes, and three of these stops do not have a protected pedestrian crossing within sight.

At three of the five ADA non-compliant bus stops under Paso Robles jurisdiction, the speed limit is 45 miles per hour. One of the ADA non-compliant stops is adjacent to a roadway with five lanes, and one of these stops does not have a protected pedestrian crossing within sight.

RTA Route 9 Pull-Out Space, Traffic Impact, and Sight Distance

Each of the six ADA non-compliant bus stops in Santa Margarita and South Atascadero under San Luis Obispo County jurisdiction is on a road shoulder. A parked bus at each stop temporarily obstructs sight distance for traffic entering the roadway. None have an adequate "No Parking" zone. At two of these stops, a stopped bus obstructs traffic **(Viejo Camino at Santa Barbara SB** and **ECR at Pine SB).** At one of these stops, a stopped bus blocks a business driveway **(ECR at Pine SB).** Based on the rural nature and relatively low traffic volumes in this area, it is not recommended at this time that the bus stops be relocated or altered.

Three of the four ADA non-compliant bus stops in Atascadero are on a road shoulder. Buses stopped at three of the four stops obstruct traffic. None of the non-compliant Atascadero bus stops have an adequate "No Parking" zone.

One of the five ADA non-compliant bus stops in Paso Robles is on a road shoulder. Buses stopped at four of the five stops obstruct traffic, and a parked bus at one of these stops also obstructs a

business driveway and a crosswalk. Four of the five non-compliant Paso Robles stops do not have an adequate "No Parking" zone.

RTA Route 9 Existing Amenities at High-Use Bus Stops

The following list provides a summary of existing passenger amenities at high-use RTA Route 9 bus stops. Corresponding proportions of RTA system boardings and alightings are also presented for each of these bus stops. The table of existing amenities at high-use stops is included in APPENDIX A.

- All five high-use bus stops have ADA compliant mobility device landing pads and safe and accessible sidewalks and/or pathways connecting the bus stop to nearby transit trip generators.

- As can be seen in the table in APPENDIX A, of the five high use bus stops served by RTA Route 9 exclusively, three high-use bus stops lack a bus stop sign **(Atascadero City Hall, Cal Poly Performing Arts Center & SB, Cal Poly Kennedy Library NB & SB,** and **Monterey @ Grand). Cal Poly Performing Arts Center NB** does not have a bus stop sign, either.

- All five of the bus stops with a high proportion of passenger boardings have both shelters and benches for waiting passengers.

- Both high-use bi-directional bus stops have bike racks..

- Two high-usel bus stops lack designated bicycle lanes connecting to the bus stop **(Las Tablas Park and Ride** and **ECR at Hwy 1 (Car Wash))**.

- All five high-use bus stops have sufficient ambient lighting.

- One bus stop with a high proportion of passenger alightings lacks an RTA information kiosk **(Monterey @ Grand)**.

- Three high use bus stops lack Braille pads.

- All five high-use bus stops have trash receptacles.

Assessment of RTA Route 10

RTA Route 10 Bus Stop Usage: Proportion of Boardings and Alightings

RTA Route 10 Weekdays Northbound

10 Daily Northbound WEEKDAY TOTALS	TOTAL		Total Stop Activity	PCT of System ONS	PCT of System OFFS
	ON	OFF			
Town Center Mall (Santa Maria Transit Center)	342	0	342	2.89%	0.00%
Prime Outlets	339	77	416	2.86%	0.65%
Allan Hancock	171	2	173	1.44%	0.02%
Tefft St. @ Carillo St. (NB)	163	79	242	1.38%	0.67%
Halcyon Park and Ride	142	118	260	1.20%	1.00%
E. Grand @ El Camino Real	100	115	215	0.84%	0.98%
Thompson Ave @ Branch St.	62	31	93	0.52%	0.26%
Greyhound (no longer served)	53	0	53	0.45%	0.00%
Marian Hospital	46	2	48	0.39%	0.02%
Nicholson St. @ Cypress St	38	0	38	0.32%	0.00%
Thompson Ave @ Nipomo HS	37	22	59	0.31%	0.19%
E. Main St. @ College Dr.	37	1	38	0.31%	0.01%
S Higuera St. @ Suburban Rd.	27	65	92	0.23%	0.55%
Thompson Ave @ Los Berros	16	18	34	0.14%	0.15%
S. Higuera @ Prado (no longer served)	13	39	52	0.11%	0.33%
South St. @ Beebee St (Higuera at South)	11	34	45	0.09%	0.29%
S. Higuera St. @ Margarita Ave	11	27	38	0.09%	0.23%
S. Higuera @ Hind (no longer served)	9	16	25	0.08%	0.14%
South St. @ High (no longer served)	6	12	18	0.05%	0.10%
S. Higuera @ Elks Lane (no longer served)	6	11	17	0.05%	0.09%
S. Higuera @ Chumash (no longer served)	6	10	16	0.05%	0.08%
South St. @ Meadow St. (no longer served)	4	28	32	0.03%	0.24%
South Street @ King (no longer served)	3	4	7	0.03%	0.03%
Santa Barbara @ Church (no longer served)	1	17	18	0.01%	0.14%
Government Center	0	740	740	0.00%	6.29%
Cal Poly @ Kennedy Library (NB)	0	63	63	0.00%	0.54%
Santa Rosa @ Higuera (no longer served)	0	46	46	0.00%	0.39%
Cal Poly @ Performing Arts	0	32	32	0.00%	0.27%
Marsh St @ Broad St.	0	25	25	0.00%	0.21%
South St. @ Exposition (no longer served)	0	9	9	0.00%	0.08%
	1643	1643	3286	13.87%	13.96%

RTA Route 10 Weekdays Southbound

10 Daily Southbound WEEKDAY TOTALS	TOTAL		Total Stop Activity	PCT of System ONS	PCT of System OFFS
	ON	OFF			
Government Center	708	0	708	5.98%	0.00%
Halcyon Park & Ride	126	82	208	1.06%	0.70%
Prime Outlets	104	299	403	0.88%	2.54%
Tefft St. @ Carillo St. (SB)	90	111	201	0.76%	0.94%
E. Grand @ El Camino Real	80	138	218	0.68%	1.17%
South Higuera St. @ Suburban	59	22	81	0.50%	0.19%
Cal Poly @ Mott Gym	49	0	49	0.41%	0.00%
South St. @ Beebee St. (Higuera at South)	41	7	48	0.35%	0.06%
S.Higuera St. @ Margarita	38	30	68	0.32%	0.25%
Thompson Ave @ Branch	35	47	82	0.30%	0.40%
South St. @ Broad St (no longer served)	24	7	31	0.20%	0.06%
Santa Barbara @ Church (no longer served)	24	1	25	0.20%	0.01%
S. Higuera @ Bridge St. (no longer served)	9	6	15	0.08%	0.05%
South Street @ Exposition (no longer served)	8	0	8	0.07%	0.00%
Thompson Ave @ HS	7	46	53	0.06%	0.39%
Marion Medical Center	7	28	35	0.06%	0.24%
S. Higuera @ Prado (no longer served)	7	11	18	0.06%	0.09%
Santa Barbara @ High (no longer served)	6	1	7	0.05%	0.01%
Town Center Mall (Santa Maria Transit Center)	5	301	306	0.04%	2.56%
Allan Hancock	4	212	216	0.03%	1.80%
S. Higuera @ Silver City Mobile (no longer served)	3	5	8	0.03%	0.04%
S. Higuera @ Granada (no longer served)	3	1	4	0.03%	0.01%
Nipomo St. @ Higuera St	2	0	2	0.02%	0.00%
South Street @ King St. (no longer served)	1	0	1	0.01%	0.00%
Greyhound (no longer served)	0	37	37	0.00%	0.31%
Thompson Ave @ Los Berros	0	11	11	0.00%	0.09%
Nicholson St. @ Cypress	0	7	7	0.00%	0.06%
	1440	1410	2850	12.16%	11.98%

RTA Route 10 Bus Stop Prerequisite Inventory Summary

A table in APPENDIX B provides a summary of bus stops served by RTA Route 10 that lack ADA accessible mobility device landing pads and/or safe and accessible connecting pathways. Corresponding proportions of RTA system boardings and alightings are also presented for each of these bus stops. The table also identifies improvement opportunities associated with these bus stops and provides staff recommendations for next steps to create a bus stop improvement plan.

RTA Route 10 High Priority Recommendation:

Remove landing pad and sidewalk obstructions: A mobility device landing pad at one relatively safe and accessible bus stop **(S. Higuera at Suburban NB)** exists but is obstructed by bus stop amenities. An ADA compliant sidewalk at one relatively safe and accessible bus stop **(Higuera at South SB)** exists but is obstructed by bus stop amenities.

RTA staff recommends removing obstructions to create ADA compliant landing pads and sidewalks at both of these stops.

RTA Route 10 Bus Stop Prerequisites: Mobility Device Landing Pads with Safe and Accessible Pathway Connections

Of the 24 RTA Route 10 bus stops, six lack ADA accessible landing pads. Four of these bus stops are under San Luis Obispo County jurisdiction **(Nipomo High School, Thompson at Branch, N. Thompson at Hwy 101 NB,** and **N. Thompson at Hwy 101 SB).** One of these bus stops is under Santa Maria jurisdiction **(Nicholson at E. Cypress).** The last of these six bus stops that lacks an ADA compliant landing pad is under San Luis Obispo City jurisdiction—it meets the five-foot width requirement but is technically one-inch shy of the eight-foot depth requirement (**Higuera at South SB**).

Of the five RTA Route 10 fixed-route bus stops that lack ADA compliant landing pads, five also lack connected sidewalks—four of these bus stops are under San Luis Obispo County's jurisdiction **(Nipomo High School NB, Thompson at Branch SB, N. Thompson at Hwy 101 NB,** and **N. Thompson at Hwy 101 SB)** and one is under Santa Maria's jurisdiction **(Nicholson at E. Cypress)**.

Two bus stops meet ADA requirements but have noteworthy operational deficiencies. At the Alan Hancock College bus stop (**S. Bradley at Jones**) under Santa Maria jurisdiction, a bus can access an ADA compliant landing pad only if it stops awkwardly between the bus stop pole and the bus bay. At a bus stop under Pismo Beach jurisdiction, multiple buses stop simultaneously at the Pismo Beach Premium Outlets bus stop, but only one ADA compliant landing pad is present.

RTA Route 10 Pedestrian Crossings

At three ADA non-compliant bus stops, the speed limit of the adjacent street is at least 45 miles per hour **(Nipomo High School NB, N. Thompson at Hwy 101 NB,** and **N. Thompson at Hwy 101 SB)**. At two non-ADA compliant stops, roadway widths are greater than four lanes, **(Nipomo High School NB and Higuera at South SB)**. Four of the ADA non-compliant bus stops do not have a protected pedestrian crossing opportunity within sight **(Nipomo High School NB, Nicholson at E. Cypress, N. Thompson at Hwy 101 NB,** and **N. Thompson at Hwy 101 SB)**.

RTA Route 10 Pull-Out Space, Traffic Impact, and Sight Distance

Four of the six ADA non-compliant bus stops are on the road shoulder; all of which are in Nipomo under San Luis Obispo County jurisdiction **(Nipomo High School NB, Thompson at Branch SB, N. Thompson at Hwy 101 NB, and N. Thompson at Hwy 101 SB)**. A parked bus in each of the six ADA non-compliant bus stops obstruct traffic. A parked bus in four ADA non-compliant bus stops obstruct sight distance for traffic entering the roadway. None have an adequate "No Parking" zone.

RTA Route 10 Existing Amenities at High-Use Bus Stops

The following list provides a summary of existing amenities at high-use RTA Route 10 bus stops. Corresponding proportions of RTA system boardings and alightings are also presented for each of these bus stops. The table of existing amenities at high-use stops is included in APPENDIX A.

- Two high-use bus stops lack safe and accessible sidewalks and/or routes connecting the bus stop to nearby transit trip generators **(Pismo Prime Outlets and Teft st. @ Carillo St. NB).**

- Of the six high-use bus stops served by RTA Route 10 exclusively, three lack RTA bus stop signs **(Santa Maria Transit Center, Halcyon Park and Ride,** and **Alan Hancock College)**. **** Notes:*** *Santa Maria does not allow RTA bus stop signs at SMAT bus stops. Halcyon Park and Ride has a large highly-visible RTA logo in the 4'x6' shelter display.*

- One bus stop with a high proportion of passenger boardings lacks an RTA information kiosk **(Santa Maria Transit Center)**.

- Four bus stops lack Braille pads.

- All six of the high-use bus stops have both shelters and benches for waiting passengers.

- At two of the high-use bus stops, passengers could be hidden from view of an approaching bus **(Halycyon Park and Ride** and **Pismo Prime Outlets)**.

- All six high-use bus stops have sufficient ambient lighting.

- Except for the **Alan Hancock College** bus stop, all five bi-directional high-use bus stops have bike racks.

- Four high-use bi-directional bus stops lack designated bicycle lanes connecting to the bus stop.

- All six high-use bus stops have trash receptacles.

Assessment of RTA Route 12/14

RTA Route 12/14 Bus Stop Usage: Proportion of Boardings and Alightings

RTA Route 12/14 Weekdays

12A Daily WEEKDAY TOTALS	TOTAL		Total Stop Activity	PCT of System ONS	PCT of System OFFS
	ON	OFF			
Government Center	831	0	831	7.02%	0.00%
Cuesta Parking Lot 3 (SB)	421	175	596	3.55%	1.49%
Morro Bay Park (SB)	334	91	425	2.82%	0.77%
Kennedy Library (NB)	216	20	236	1.82%	0.17%
Foothill @ Casa (NB) (Santa Roas at Mstng / Stnr Glen)	205	9	214	1.73%	0.08%
Morro Bay Park (NB)	122	288	410	1.03%	2.45%
Cuesta Parking Lot 3 (NB)	116	676	792	0.98%	5.75%
10th @ LOVR	87	95	182	0.73%	0.81%
10th @ Santa Ynez	77	90	167	0.65%	0.76%
Cuesta Building 1400 (no longer served)	67	47	114	0.57%	0.40%
Pine @ LOVR	63	46	109	0.53%	0.39%
Cuesta West Side (no longer served)	58	12	70	0.49%	0.10%
Ramona @ 7th	46	27	73	0.39%	0.23%
Cuesta Building 1400 (no longer served)	44	42	86	0.37%	0.36%
Cuesta West Side (no longer served)	43	14	57	0.36%	0.12%
Pine @ Loma	42	29	71	0.35%	0.25%
Santa Ysabel @ 15th	32	3	35	0.27%	0.03%
Santa Ysabel @ 7th	29	9	38	0.24%	0.08%
11th @ Ramona	28	48	76	0.24%	0.41%
11th @ El Morro	27	51	78	0.23%	0.43%
LOVR @ Palisades	25	20	45	0.21%	0.17%
7th @ El Morro	23	16	39	0.19%	0.14%
2nd @ Santa Maria	21	17	38	0.18%	0.14%
South Bay Boulevard @ Quintana	18	12	30	0.15%	0.10%
Kansas Avenue	16	8	24	0.14%	0.07%
Santa Ysabel @ 15th	14	39	53	0.12%	0.33%
Kansas Avenue	13	6	19	0.11%	0.05%
Kennedy Library (SB)	6	187	193	0.05%	1.59%
Highland @ HWY 1	6	56	62	0.05%	0.48%
Patricia @ Foothill (no longer served)	6	0	6	0.05%	0.00%
Foothill @ Casa (SB) (Santa Rosa at Foothill)	5	102	107	0.04%	0.87%
South Bay Boulevard @ Quintana	5	10	15	0.04%	0.08%
Achievement House	3	4	7	0.03%	0.03%
LOVR @ Buckskin (no longer served)	2	0	2	0.02%	0.00%
Men's Colony	1	7	8	0.01%	0.06%
Government Center	0	709	709	0.00%	6.03%
LOVR @ Buckskin (no longer served)	0	6	6	0.00%	0.05%
Patricia @ Foothill (no longer served)	0	5	5	0.00%	0.04%
Men's Colony	0	1	1	0.00%	0.01%
	3052	2977	6029	25.77%	25.30%

RTA Route 12/14 Bus Stop Prerequisite Inventory Summary

A table in APPENDIX B provides a summary of bus stops served by RTA Route 12/14 that lack ADA accessible mobility device landing pads and/or safe and accessible connecting pathways. Corresponding proportions of RTA system boardings and alightings are also presented for each of these stops. The table also identifies improvement opportunities associated with these bus stops and provides staff recommendations for next steps to create a bus stop improvement plan.

RTA Route 12/14 High Priority Recommendation:

The lowest use RTA Route 12/14 bus stops that lack mobility device landing pads **(Kansas at Highway 1** and **California Men's Colony)** are currently served as call stops.

RTA staff recommends no immediate actions to stops served by RTA Route 12/14.

RTA Route 12/14 Bus Stop Prerequisites: Mobility Device Landing Pads with Safe and Accessible Pathway Connections

Of the 22 RTA Route 12/14 bus stops, thirteen lack ADA accessible landing pads: all are under San Luis Obispo County jurisdiction. Ten of these ADA non-compliant bus stops lack connecting pathways. Nine of the ten bus stops that lack landing pads are in Los Osos, except for **Kansas at Highway 1,** which is already a call stop and technically not considered part of fixed-route service.

Two bus stops under Morro Bay jurisdiction have landing pads but no connecting pathways **(South Bay at Quintana SB** and **South Bay at Quintana NB).**

RTA Route 12/14 Pedestrian Crossings

None of the non-ADA compliant bus stops have speed limits on adjacent streets that exceed 40 miles per hour or roadway widths greater than two lanes, except for **Santa Rosa at Murray NB, which adjacent to a five lane street**. Seven of the thirteen ADA non-compliant bus stops lack a

protected pedestrian crossing opportunity within sight, and they are all under San Luis Obispo County jurisdiction (two are on the Highway 1 corridor and the other five are in Los Osos).

RTA Route 12/14 Pull-Out Space, Traffic Impact, and Sight Distance

Eleven of the thirteen ADA non-compliant bus stops are on the road shoulder; ten of these bus stops are in Los Osos, and one is **Kansas at Highway 1;** all are under San Luis Obispo County jurisdiction. A bus temporarily parked in twelve of the thirteen ADA non-compliant bus stops obstructs traffic.Furthermore, buses at six stops obstruct sight distance for traffic entering the roadway, buses at three stops obstruct residential driveways, and buses at one stop obstructs sightlines for parked vehicles. None ADA non-compliant stopshave an adequate "No Parking" zone.

RTA Route 12/14 Existing Amenities at High-Use Bus Stops

The table in APPENDIX A provides a summary of existing amenities at high-use RTA Route 12/14 bus stops. Corresponding proportions of RTA system boardings and alightings are also presented for each of these bus stops.

Cuesta College is the only high-use bus stop served by RTA Route 12/14 exclusively; it has an ADA compliant landing pad, and it has a sidewalk with a safe and accessible pathway to the campus core. The Cuesta College bus stop has an RTA bus stop sign, an RTA information kiosk, and a Braille pad. It also has passenger shelters, benches, ambient lighting, and trash and recycle receptacles. There are no bike racks, and no bike lane is directly connected to the stop.

Assessment of RTA Route 15

RTA Route 15 Bus Stop Usage: Proportion of Boardings and Alightings

RTA 15 Weekdays Southbound

15 Weekday Southbound WEEKDAY TOTALS	TOTAL		Total Stop Activity	PCT of System ONS	PCT of System OFFS
	ON	OFF			
Burton @ Ardath	16	0	16	0.14%	0.00%
Burton @ Main	13	0	13	0.11%	0.00%
Ocean @ Cayucos Dr.	11	7	18	0.09%	0.06%
Ocean @ 9th	11	1	12	0.09%	0.01%
Hearst Castle	10	0	10	0.08%	0.00%
Highway 1 @ San Jacinto	9	6	15	0.08%	0.05%
Ocean @ 3rd	9	3	12	0.08%	0.03%
Ardath @ Green (Ardath @ Hwy 1)	8	0	8	0.07%	0.00%
Main @ Arlington	7	0	7	0.06%	0.00%
Moonstone @ Windsor	6	0	6	0.05%	0.00%
Burton @ Cambria Pines Lodge	6	0	6	0.05%	0.00%
Main @ Tamson	5	0	5	0.04%	0.00%
Main @ Errol (no longer served)	4	9	13	0.03%	0.08%
Ocean @ Old Creek Rd.	4	5	9	0.03%	0.04%
Main @ Bluebird	3	1	4	0.03%	0.01%
Main @ Veterans Hall	3	0	3	0.03%	0.00%
Morro Bay Park	0	76	76	0.00%	0.65%
Moonstone @ San Simeon Pines	0	7	7	0.00%	0.06%
Hearst Drive @ San Simeon	0	0	0	0.00%	0.00%
Moonstone @ Castle Inn	0	0	0	0	0
Moonstone @ Mariner's Inn (SB)	0	0	0	0	0
	125	115	240	1.06%	0.98%

RTA Route 15 Weekdays Northbound

15 Weekday Northbound WEEKDAY TOTALS	TOTAL		Total Stop Activity	PCT of System ONS	PCT of System OFFS
MORRO BAY	ON	OFF			
Morro Bay Park	75	0	75	0.63%	0.00%
Ocean @ Cayucos Dr. (Cayucos @ Ocean)	8	3	11	0.07%	0.03%
Main @ Errol (no longer served)	7	0	7	0.06%	0.00%
Main @ Elena (no longer served)	4	3	7	0.03%	0.03%
Main @ Veterans Hall (Main @ Skate Park)	3	7	10	0.03%	0.06%
Main @ San Joaquin	3	4	7	0.03%	0.03%
Burton @ Yorkshire	2	5	7	0.02%	0.04%
Main @ Bonita (no longer served)	2	2	4	0.02%	0.02%
Moonstone @ Windsor	1	9	10	0.01%	0.08%
Ardath @ Green (Ardath @ Hwy 1)	1	4	5	0.01%	0.03%
Burton @ Ardath	0	17	17	0.00%	0.14%
Burton @ Main	0	15	15	0.00%	0.13%
Hearst Castle	0	9	9	0.00%	0.08%
Ocean @ 8th St	0	7	7	0.00%	0.06%
Ocean @ 4th (Ocean @ 3rd (NB))	0	6	6	0.00%	0.05%
Main @ Tamson	0	4	4	0.00%	0.03%
Castillo @ Otter	0	3	3	0.00%	0.03%
Ocean @ Old Creek Rd	0	2	2	0.00%	0.02%
Moonstone @ San Simeon Pines	0	2	2	0.00%	0.02%
Cornwall @ Arlington (Main @ Cornwall)	0	1	1	0.00%	0.01%
Main @ Jamaica (no longer served)	0	0	0	0	0
Main @ Bluebird Inn	0	0	0	0	0
Moonstone @ Mariner's Inn (NB)	0	0	0	0	0
Moonstone @ Firesiede Inn	0	0	0	0	0
	106	103	209	0.90%	0.88%

RTA Route 15 Existing Amenities at High-Use Bus Stops

Since it lacks a single bus stop with greater than 1% of the total RTA system boardings and alightings, RTA Route 15 alone serves no high-use bus stops.

Morro Bay Park is a high-use stop, and it is discussed in the high-use multi-route passenger facility section above. Morro Bay Park is served by RTA Route 12, RTA Route 15, and Morro Bay Transit services.

RTA Route 15 Bus Stop Prerequisite Inventory Summary

A table in APPENDIX B provides a summary of bus stops served by RTA Route 15 that lack ADA accessible mobility device landing pads and/or safe and accessible connecting pathways. Corresponding proportions of RTA system boardings and alightings are also presented for each of these bus stops. The table also identifies improvement opportunities associated with these stops and provides staff recommendations for next steps to create a bus stop improvement plan.

RTA Route 15 High Priority Recommendation:

Remove landing pad and sidewalk obstructions: A mobility device landing pad at one relatively safe and accessible stop **(MAIN at CORNWALL** in Cambria**)** exists but is obstructed by a bench connected to the "Old Station Store."

> *RTA staff recommends working with the "Old Station Store" property owner to remove obstructions to create an ADA compliant landing pad.*

RTA Route 15 Bus Stop Prerequisites: Mobility Device Landing Pads with Safe and Accessible Pathway Connections

Of the 37 RTA Route 15 bus stops, 31 lack ADA accessible landing pads. One of these ADA non-compliant bus stops **(Highway 1 at SAN JACINTO)** is under Morro Bay jurisdiction. The rest of the 30 bus stops are under San Luis Obispo County jurisdiction.

Of the 31 RTA Route 15 stops without landing pads, 23 also lack connecting pathways; all of these bus stops are under San Luis Obispo County jurisdiction.

Two stops under Morro Bay jurisdiction have ADA compliant landing pads but lack connecting pathways **(South Bay at Quintana SB** and **South Bay at Quintana NB).**

RTA Route 15 Pedestrian Crossings

At one ADA non-compliant bus stop, the speed limit of the adjacent street exceeds 45 miles per hour and the roadway is five lanes wide (**Highway 1 @ SAN JACINTO**).

A total of 20 of the ADA non-compliant bus stops along the north coast lack a protected pedestrian crossing opportunity.

RTA Route 15 Pull-Out Space, Traffic Impact, and Sight Distance

A total of 18 of the 31 ADA non-compliant bus stops are on the road shoulder; all of which are under San Luis Obispo County jurisdiction. A bus temporarily parked in 24 of the 31 ADA non-compliant bus stops obstructs traffic; all 24 obstruct sight distance for traffic entering the roadway, 5 obstruct business driveways, and 2 obstruct parked vehicles. A total of 29 lack a "No Parking" zone.

Assessment of Paso Express

Paso Express Bus Stop Usage: Proportion of Boardings and Alighting

Paso Express Route A

Paso Express Route A WEEKDAY TOTALS	TOTAL		Total Stop Activity	PCT of System ONS	PCT of System OFFS
	ON	OFF			
Niblick at South River	60	48	108	0.51%	0.39%
Niblick at Bearcat	55	38	93	0.46%	0.31%
8th at Pine	53	75	128	0.44%	0.62%
Spring at 32nd (NB) (no longer served)	35	0	35	0.30%	0.00%
Spring at 28th (NB)	33	8	40	0.27%	0.06%
Stoney Creek at Creston	30	73	103	0.25%	0.60%
Spring at 24th (NB)	28	0	28	0.23%	0.00%
Spring at 34th (SB)	25	48	73	0.21%	0.39%
Spring at 34th (NB) (no longer served)	23	0	23	0.19%	0.00%
Spring at 5th	20	30	50	0.17%	0.25%
Spring at 14th	18	23	40	0.15%	0.19%
Sherwood at Creston	18	13	30	0.15%	0.10%
Creston at Melody	18	10	28	0.15%	0.08%
Creston at Scott	15	30	45	0.13%	0.25%
Creston at Bolen	15	25	40	0.13%	0.21%
Scott at Via Ramona	15	13	28	0.13%	0.10%
Spring at 21st	15	3	18	0.13%	0.02%
Spring at 17th	15	0	15	0.13%	0.00%
Spring at 2nd	15	0	15	0.13%	0.00%
Spring at 10th	13	23	35	0.11%	0.19%
Scott at Westfield	13	5	18	0.11%	0.04%
Riverside at Ysabel	13	3	15	0.11%	0.02%
Spring at 28th	13	0	13	0.11%	0.00%
Oak at 36th (no longer served)	13	0	13	0.11%	0.00%
Fontana at Linne	10	10	20	0.08%	0.08%
Creston at Capital Hill	10	5	15	0.08%	0.04%
Airport at Scott	8	15	23	0.06%	0.12%
Scott at Larkellen (no longer served)	8	8	15	0.06%	0.06%
Ysabel	8	3	10	0.06%	0.02%
Spring at 26th	5	23	28	0.04%	0.19%
Sherwood at Commerce	5	0	5	0.04%	0.00%
Creston at Lana	3	13	15	0.02%	0.10%
Spring at 32nd (SB)	3	8	10	0.02%	0.06%
Riverside at 20th	3	3	5	0.02%	0.02%
Spring at 19th	3	0	3	0.02%	0.00%
Creston at Nickerson	0	28	28	0.00%	0.23%
Spring at 28th (SB)	0	15	15	0.00%	0.12%
Spring at 30th (SB)	0	10	10	0.00%	0.08%
Riverside at 24th	0	5	5	0.00%	0.04%
Riverside at 14th	0	3	3	0.00%	0.02%
Rambouillet at Torrey Pines	0	3	3	0.00%	0.02%
Rambouillet at Nicklaus	0	0	0	0.00%	0.00%
Rambouillet at Wade	0	0	0	0.00%	0.00%
	628	610	1238	5%	5%

Paso Express Route B

Paso Express Route B WEEKDAY TOTALS	TOTAL		Total Stop Activity	PCT of System ONS	PCT of System OFFS
	ON	OFF			
8th at Pine	93	103	195	0.78%	0.87%
Niblick at South River	85	55	140	0.72%	0.47%
Niblick at Bearcat	63	53	115	0.53%	0.45%
Stoney Creek at Creston	50	30	80	0.42%	0.25%
Spring at 13th	45	0	45	0.38%	0.00%
Creston at Nickerson	43	0	43	0.36%	0.00%
Spring at 8th	35	3	38	0.30%	0.02%
Spring at 34th (NB) (no longer served)	30	10	40	0.25%	0.08%
Spring at 30th (NB)	28	5	33	0.23%	0.04%
Spring at 28th (NB)	25	3	28	0.21%	0.02%
Creston at Stoney Creek	23	40	63	0.19%	0.34%
Creston at Oak Meadows	23	13	35	0.19%	0.11%
Spring at 4th	20	23	43	0.17%	0.19%
Riverside at Ysabel	20	5	25	0.17%	0.04%
Spring at 15th	18	23	40	0.15%	0.19%
Creston at Walnut	18	15	33	0.15%	0.13%
Spring at 19th	18	15	33	0.15%	0.13%
Airport at Scott	15	8	23	0.13%	0.06%
Spring at 32nd (NB) (no longer served)	15	0	15	0.13%	0.00%
Spring at 21st	13	25	38	0.11%	0.21%
Spring at 24th (NB)	13	5	18	0.11%	0.04%
Spring at 10th	10	33	43	0.08%	0.28%
Creston at Sherwood	10	13	23	0.08%	0.11%
Oak at 2nd	8	30	38	0.06%	0.25%
Scott at Larkellen (no longer served)	8	5	13	0.06%	0.04%
Ysabel	8	5	13	0.06%	0.04%
Spring at 34th (SB)	5	125	130	0.04%	1.06%
Scott at Westfield	5	13	18	0.04%	0.11%
Creston at Rolling Hills	5	13	18	0.04%	0.11%
Niblick at Nicklaus	5	3	8	0.04%	0.02%
Riverside at 19th	5	3	8	0.04%	0.02%
Sherwood at Commerce	5	0	5	0.04%	0.00%
Spring at 30th (SB)	3	40	43	0.02%	0.34%
Spring at 32nd (SB)	3	30	33	0.02%	0.25%
Spring at 24th (SB)	3	18	20	0.02%	0.15%
Scott at Via Ramona	3	13	15	0.02%	0.11%
Creston at Capitol Hill	3	5	8	0.02%	0.04%
Rambouillet at Wade	3	3	5	0.02%	0.02%
Creston at Shannon Hill	3	3	5	0.02%	0.02%
Spring at 28th (SB)	0	20	20	0.00%	0.17%
Rambouillet at Torrey Pines	0	5	5	0.00%	0.04%
Riverside at 14th	0	3	3	0.00%	0.02%
Riverside at 17th	0	0	0	0.00%	0.00%
	778	808	1585	7%	7%

Paso Express Bus Stop Prerequisite Inventory Summary

A table in APPENDIX B provides a summary of bus stops served by the Paso Express that lack ADA c mobility device landing pads and/or safe and accessible pathways. The table in APPENDIX B identifies improvement opportunities associated with these bus stops and provides staff recommendations for next steps to create a bus stop improvement plan.

Paso Express High Priority Recommendation:

Remove landing pad obstructions: Mobility device landing pads at three relatively safe and accessible bus stops **(Creston at Walnut, Creston at Bolen,** and **Stoney Creek at Creston EB)** exist but are obstructed by bus stop amenities.

> *RTA staff recommends removing obstructions to create ADA compliant landing pads all three of these stops.*

Paso Express Bus Stop Prerequisites: Mobility Device Landing Pads with Safe and Accessible Pathway Connections

Of the 69 Paso Express bus stops (all are under Paso Robles jurisdiction), 27 lack ADA accessible landing pads, so they are not ADA compliant. Eight Paso Express bus stops lack connected sidewalks.

Paso Express Pedestrian Crossings

At two of the 27 ADA non-compliant bus stops, the speed limit of the adjacent street is 45 miles per hours. Five of these 27 stops are adjacent to four or five lane roadways. Seven of these 27 stops do not have a protected pedestrian crossing within sight.

Paso Express Pull-Out Space, Traffic Impact, and Sight Distance

A stopped bus at 18 of the 27 ADA non-compliant stops temporarily obstructs traffic. A stopped bus at 25 of these 27 stops obstructs sight distance for pedestrians and/or traffic entering the roadway. 23 of these 27 stops do not have an adequate "No Parking" zone.

Paso Express Existing Amenities at High-Use Bus Stops

The Paso Express has one high-use bus stop (**Spring at 34th SB**). This stop has a shelter, a bench, a trash can, and ambient lighting. It does not have a braille pad, bike rack, labeled connected bike lane, or any type of vending.

References

[1] Easer Seals Project Action (2006). Toolkit for the assessment of Bus Stop Accessibility and Safety, (pp. 6 and pp. 14-15). Washington, DC.

[2] U.S. Department of Transportation, Federal Highway Administration (February 2008). Pedestrian Safety Guide for Transit Agencies, (pp. 37). Washington, DC.

[3] Darlene Bonanno v. Central Contra Costa Transit Authority, Supreme Court of California

[4] SLOCOG North County Transit Plan (May 2012).

Bus Stop Photo Catalog

A comprehensive bus stop photo catalog has been created for all stops surveyed. Please contact RTA for more information.

APPENDIX A: Amenities at High-Use Bus Stops

High-Use Bus Stop Ridership Proportions and Existing Amenities

High-Use Bus Stop Ridership Proportions and Existing Amenities

					ADA Compliance	Connected sidewalk	Hidden Passengers	Adjacent Properties	Signage and Route finding			Amentities for Waiting Passengers			Lighting	Bikes		Trash	Vending
		High-Use Stops	Ons	Offs	ADA Compliant Infrastructure (i.e. landing pad and connection) at the stop ?	Safe and accessible sidewalk connecting bus stop to nearby developments?	Obstructions hidding waiting passengers from view of approaching bus	Adjacent properties:	RTA / Paso Express bus stop sign?	RTA / Paso Express info kiosk	Braille Pad	Benches	Shelter	alternative shelter	Lighting	Bike rack or bike storage	Labeled bike lane connecting to bus stop	Trash receptacle at bus stop	Newspaper vending
Multi-route		Government Center	19.58%	17.44%	Yes	Yes	No	Small Retail, Office Building, Government Buildings, Library	Yes	Yes	Yes	4 in shelter, 4 free standing	two: 4.5' x 20' each	N/A	Street light, Solar shelter light	Ribbon Rack	No	Bolted	No
Multi-route		Pine at 8th (North County Transportation Center) (Train Station)	6.48%	6.71%	Yes	Yes	No	Residential Homes, Small Retail, Public Parking Lot, Government Buildings, Vacant Lot, Transportation Center	Yes	Yes	No	1 in shelter, 1 free standing	two: 12' x 4'	N/A, Awnings at Transit Center, Trees	Street light, Walkway lights	Reverse U	No	1 bolted	No
RTA 12/14	Bidirectional	Cuesta College	5.35%	2.46%	Yes	Yes	No	Cuesta College	Yes	Yes	Yes	4 in shelter	two: 12'x4' each	N/A, Trees	Hardwired shelter light, Walkway lights, Lights in adjacent parking lot	None	No	2 unsecured trash, +2 unsecured recycle	Yes
Multi-route		Morro Bay Park	4.48%	3.87%	No mobility device landing pad, except for busses stopped at shelter	Yes	Shelter	Residential Homes, Government Buildings, Fire Dept.	Yes	Yes	No	2 in shelter, 1 free standing	17' x 16'	N/A, Trees	Street light	Ribbon Rack	No	Heavy	No
RTA 9	Bidirectional	Atascadero Transit Center	4.37%	5.31%	Yes	Yes	Info kiosk, Curve	Shopping Mall / Center, Office Building, Public Parking Lot, Government Buildings, Library, Galaxy Theatre	No	Yes	No	4 in shelter, 6 free standing	two: 12' x 23' each	N/A	Solar shelter light, Walkway lights	Yes, 2 reverse U's	Yes	3 bolted	No
Multi-route		Cal Poly Kennedy Library (NB)	3.84%	0.96%	Yes	Yes	No	Public Parking Lot, Government Buildings, Library, Lecture Halls, Classrooms	No	Yes	No	2 in shelter, 1 free standing	two: 8' x 5' and 12' x 5'	N/A	Street light, Solar shelter light, Lights in adjacent parking lot	None	Yes	Bolted +Recycle	Yes
RTA 10	Bidirectional	Pismo Prime Outlets	3.74%	3.20%	No mobility device landing pad, except for busses stopped at shelter	No, sidewalk ends in outlet driveways	Shelter	Small Retail, Shopping Mall / Center, Public Parking Lot	Yes	Yes	Yes	1 in shelter, 2 free standing	11.5' x 5'	N/A	Street light, Hardwired shelter light, In adjacent parking lot	Peak Rack	No	Bolted	No
RTA 10	Bidirectional	Town Center Mall (Santa Maria Transit Center)	2.89%	2.56%	Yes	Yes	No	Residential Homes, Small Retail, Office Building, Park, Vacant Lot	No	No	No	Transit center: many -- see photos	Transit center: many -- see photos	N/A	Street light, Walkway lights, In adjacent parking lot, On adjacent building	Many revers U's' -- see photos	No	Yes, many -- see photos	Yes
RTA 10	Bidirectional	Halcyon Park and Ride	2.26%	1.70%	Yes	Yes	Parked Vehicles	Residential Homes, Small Retail, Motel / Hotel	No	Yes	No	1 in shelter	16' x 15.5'	N/A	Street light, Solar shelter light	Peak Rack	Yes	Unsucured	No
Multi-route		Foothill @ Casa (NB) (Santa Rosa @ Mustang Village & Stnr Glen Apts.)	2.15%	0.22%	Yes	Yes	No	Mustang Village and Stenner Glen Apts, Small retail across street	Yes	Yes	No	None	None	No, Trees	Street light, Walkway lights	None	No	None	No
RTA 9	Bidirectional	Las Tablas Park and Ride	1.82%	1.67%	Yes	Yes	No	Office Building, Vacant Lot	Yes	Yes	Yes	1 in shelter, 1 free standing	4.5' x 138"	N/A	Street light, Solar shelter light,In adjacent parking lot, On adjacent building	Reverse U	No	1 unsecured, 1 chained	No
RTA 10	Bidirectional	E. Grand @ El Camino Real	1.52%	2.15%	Yes	Yes	No	Small Retail	Yes	Yes	No	Bench inside shelter, Free standing bench	12' x 5'	N/A, Trees	Street light, Hardwired shelter light, In adjacent parking lot	None	No	2 bolted	No
RTA 10	Bidirectional	Alan Hancock College (S. Bradley at Jones)	1.48%	1.82%	Yes	Yes	No	Alan Hancock College	No	Yes	No	1 in shelter	13' x 5'	N/A	Street light	None	No	Bolted	No
RTA 10	Northbound	Tefft St. @ Carillo St. (NB)	1.38%	0.67%	Yes	No, sidewalk ends in business driveway	No	Small Retail, Vacant Lot	Yes	Yes	Yes	1 in shelter	10.5' x 5'	N/A	Street light, Solar shelter light, On adjacent building	None	No	Bolted	No
RTA 9	Southbound	ECR at Hwy 1 (Carwash)	1.10%	0.18%	Yes	Yes	No	Supermarket / convenience store, Small Retail, Public Parking Lot, Car Wash	Yes	Yes	Yes	1 in shelter	8'x3'	N/A	Street light, Solar shelter light	None	None	Bolted	Yes
RTA 9	Southbound	Cal Poly Kennedy Library (SB)	0.07%	1.74%	Yes	Yes	No	Public Parking Lot, Government Buildings, School, Library	No	Yes	No	1 in shelter, 1 free standing	4.5'x9'	N/A	Street light, Solar shelter light, In adjacent parking lot	Peak rack	Yes	Bolted +Recycle	Yes
PE	A&B	Spring at 34th (SB)	0.25%	1.47%	Yes	Yes	No	Apartments, Residential homes, Small retail, Vacant lot	Yes	Yes	No	1 in shelter	9'x5'	N/A, Trees	Street light, Solar shelter light, Outside light on adjacent building	None	None	Welded	No
Multi-route		Foothill @ Casa (SB) (Santa Rosa @ Foothill)	0.08%	1.42%	Yes	Yes	No	Small Retail, Office Building	Yes	Yes	No	None	None	Yes, Office Building Porch, Trees	In adjacent parking lot, On adjacent building	None	Yes	None	No
RTA 9	Southbound	Monterey @ Grand	0.02%	1.11%	Yes	Yes	Parked Vehicle, Large blank sign	Small Retail, Monterey St. Hotel/Motel Row	No	No	No	None	None	No	Street light, In adjacent parking lot, On adjacent building	None	Yes	Bolted	No
			62.87%	56.66%															

High-use multi-route stop without mobility device landing pads for all stopped buses

High boardings without amentities for waiting passengers

APPENDIX B: Non-ADA compliant Bus Stops

RTA 9 Bus Stops without ADA Mobility Device Landing Pads and/or Accessible Connected Throughways - 2013 Assessment

RTA 9 Bus Stops without ADA Mobility Device Landing Pads and/or Accessible Connected Throughways - 2013 Assessment

						ADA Accessible Landing Pads & Sidewalks		Pedestrian Crossings				Pull-out Space, Traffic Impact, and Sight Distance			
						Mobility Device Landing Pad	Connected Sidewalk	Railroad X-ing	Speed Limit	# of Lanes	Nearest Crossing	Pull-out space	Bus as Obstruction	Sight Distance	"No Parking"
		Bus Stop Name	PCT of System ONS	PCT of SYSTEM OFFS	Jurisdiction	Are adequate ADA-compliant mobility device landing pads provided?	Sidewalks and Bus Stop Connectivity	Near at-grade railroad crossing?	Posted speed limit 45 mph or above?	Including both sides of road, total auto lanes	Nearest protected pedestrian crossing opportunity within sight	Bus stop pull-out space	Is a stopped bus an obstruction? To what?	Poor sight distance?	Adequate "No Parking Zone"?
RTA 9	Northbound	Cal Poly Kennedy Library	2.02%	0.25%	Cal Poly	Obstructed by bus stop amenities	Sidewalk	No	No, 25	2	Intersection & Mid-block crosswalk	Sidewalk & loading zone < 9'	Yes: Traffic, Crosswalk	No	No, 0'
RTA 9	Southbound	Viejo Camino at Bocina (Bordeaux Apts)	0.50%	0.45%	SLO County	No mobility device landing pad	No Sidewalk	No	Yes, 55	3	None	Road shoulder without a sidewalk	No	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 110'
RTA 9	Northbound	ECR at Encina	0.42%	0.59%	SLO City	Obstructed by bus stop amenities	Sidewalk	No	No, 35	2	Intersection	Sidewalk and loading zone ≥ 9' wide	Yes: Business driveway	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 9	Northbound	Theatre at Theatre	0.30%	0.17%	Paso Robles	No mobility device landing pad	No Sidewalk	No	Yes, 45	2	Intersection & Mid-block crosswalk	Road shoulder without a sidewalk	Yes: Traffic, Business driveway, Crosswalk	For pedestrians using crosswalks; For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 40'
RTA 9	Southbound	Target Shopping Center	0.23%	0.15%	Paso Robles	No mobility device landing pad	Sidewalk	No	Yes, 45	2	None	Sidewalk and loading zone ≥ 9' wide, Bus Bay	No	No	No, 37'
RTA 9	Southbound	Viejo Camino at Santa Barbara	0.19%	0.11%	SLO County	No mobility device landing pad	No Sidewalk	No	Yes, 55	2	None	Road shoulder without a sidewalk	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 9	Northbound	ECR at Del Rio	0.17%	0.06%	Atascadero	No mobility device landing pad	No Sidewalk	No	Yes, 45	5	Intersection	Road shoulder without a sidewalk	Yes: Traffic	For pedestrians using crosswalks; For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 9	Northbound	Spring at 2nd	0.13%	0.00%	Paso Robles	7'6" deep mobility device landing pad	Sidewalk	No	No, 30	5	Intersection	Sidewalk & loading zone < 9'	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	Yes
RTA 9	Southbound	ECR at Santa Margarita	0.08%	0.06%	SLO County	Mobility Device Landing Pad	No Sidewalk	No	Yes, 55	2	None	Road shoulder without a sidewalk, Bus Bay	No	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 9	Northbound	ECR at Santa Margarita (Country Care)	0.07%	0.07%	SLO County	No mobility device landing pad	No Sidewalk	No	Yes, 55	2	None	Road shoulder without a sidewalk	No	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 9	Northbound	ECR at Santa Cruz	0.06%	0.02%	Atascadero	No mobility device landing pad	No Sidewalk	No	Yes, 45	2	None	Road shoulder without a sidewalk	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 9	Southbound	Cal Poly Performing Arts	0.06%	1.61%	Cal Poly	Obstructed by bus stop amenities	Sidewalk	No	No, 25	2	Intersection	Sidewalk and loading zone ≥ 9' wide, Bus Bay	No	No	No, 60'
RTA 9	Northbound	ECR at Maria	0.06%	0.10%	SLO County	No mobility device landing pad	Disconnected Sidewalk	No	Yes, 45	2	None	Road shoulder without a sidewalk	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 9	Northbound	ECR at Pine (Garden Farms)	0.05%	0.05%	SLO County	No mobility device landing pad	No Sidewalk	Yes	Yes, 55	2	None	Road shoulder without a sidewalk	No	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 9	Southbound	ECR at Carmel	0.04%	0.06%	SLO County	Mobility Device Landing Pad	No Sidewalk	No	Yes, 55	3	None	Road shoulder without a sidewalk, Bus Bay	No	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 9	Southbound	ECR at Pine (Garden Farms)	0.03%	0.08%	SLO County	No mobility device landing pad	No Sidewalk	Yes	Yes, 55	2	None	Road shoulder without a sidewalk	Yes: Traffic, Business Driveway	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 9	Northbound	ECR at Atalaya	0.02%	0.11%	Atascadero	No mobility device landing pad	No Sidewalk	No	Yes, 45	2	None	Road shoulder without a sidewalk	No	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 9	Southbound	ECR at Atalaya	0.02%	0.11%	Atascadero	No mobility device landing pad	Sidewalk	No	Yes, 45	2	None	Sidewalk & loading zone < 9'	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 48'
RTA 9	Northbound	Viejo Camino at Santa Barbara	0.02%	0.09%	SLO County	Mobility Device Landing Pad	No Sidewalk	No	Yes, 55	2	None	Road shoulder without a sidewalk, Bus bay only 38' long	Yes: Traffic, Business Driveway	Yes, from curve	No, 0'
RTA 9	Southbound	Spring at 4th	0.00%	0.08%	Paso Robles	No mobility device landing pad	Sidewalk	No	No, 30	3	Intersection	Sidewalk & loading zone < 9'	Yes: Traffic	For pedestrians using crosswalks; For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 53'
RTA 9	Northbound	ECR at Carmel	0.00%	0.05%	SLO County	Mobility Device Landing Pad	No Sidewalk	No	Yes, 55	3	None	Road shoulder without a sidewalk, Bus Bay	No	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 9	Northbound	Grand at Wilson (NB)	No Match	No Match	SLO City	No mobility device landing pad	Sidewalk (cracks)	No	No, 35	5	Intersection	Sidewalk and loading zone ≥ 9' wide	Yes: Traffic	For Pedestrians using crosswalks	No, 93'
RTA 9	Northbound	Grand at McCollum	No Match	No Match	SLO City	No mobility device landing pad	Sidewalk	No	No, 25	5	None	Sidewalk & loading zone < 9'	Yes: Traffic	No	No, 71'
RTA 9	Northbound	ECR at Santa Clara	No Match	No Match	SLO County	Mobility Device Landing Pad	No Sidewalk	No	Yes, 55	2	None	Road shoulder without a sidewalk, Bus Bay	No	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 9	Southbound	ECR at Santa Clara	No Match	No Match	SLO County	Mobility Device Landing Pad	No Sidewalk	No	Yes, 55	2	None	Road shoulder without a sidewalk, Bus Bay	No	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 9	Northbound	South Vine at 1st (Gateway Center)	No Match	No Match	Paso Robles	No mobility device landing pad	Sidewalk	No	Yes, 45	2	Intersection	Sidewalk & loading zone < 9'	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'

Problem	No mobility device landing pad	No Sidewalk	Near at-grade railroad crossing	High Speed Traffic	Wide pedestrian crossings	No Pedestrian Crossing Opportunity	Inadequate pull-out space	Stopped bus obstructs traffic	Poor sight distance	Inadequate "No Parking" Zone
Reccomendation	Plan mobility device landing pad, or move stop, serve as flag stop, or end service to stop, or maintain status quo	Plan sidewalk, or move stop, serve as flag stop, or end service to stop, or maintain status quo	Consider moving stop or ending service to stop, or maintaining status quo	Consider lowering speed limit, moving stop, or ending service to stop, or maintaining status quo	Consider narrowing pedestrian street crossing, or moving stop, or ending service to stop, or maintaining status quo	Consider installing pedestrian protected crossing, or moving stop, or ending service to stop, or maintaining status quo	Consider redesigning stop, moving stop, or ending service to stop, or maintaining status quo	Consider redesigning stop, moving stop, or ending service to stop, or maintaining status quo	Consider redesigning stop, moving stop, or ending service to stop, or maintaining status quo	Consider planning additional "No Parking" space, or redesigning stop, moving stop, or ending service to stop, or maintaining status quo

Problem	Unsatisfactory Mobility Device Landing Pad	Disconnected Sidewalk
Reccomendation		Plan connecting sidewalk, or move stop, serve as flag stop, or end service to stop, or maintain status quo

Problem	Obstructed mobility device landing pad	Constricted, limited, or cracked sidewalk
Reccomendation	Remove landing pad obstructions, or maintain status quo	Remove obstructions from sidewalks and/or Plan sidewalk repair, or move stop, or end service to stop, or maintain status quo

RTA 10 Bus Stops without ADA Mobility Device Landing Pads and/or Accessible Connected Throughways - 2013 Assessment

RTA 10 Bus Stops without ADA Mobility Device Landing Pads and/or Accessible Connected Throughways - 2013 Assessment

						ADA Accessible Landing Pads & Sidewalks		Pedestrian Crossings				Pull-out Space, Traffic Impact, and Sight Distance			
						Mobility Device Landing Pad	Connected Sidewalk	Railroad X-ing	Speed Limit	# of Lanes	Nearest Crossing	Pull-out space	Bus as Obstruction	Sight Distance	"No Parking"
		Bus Stop Name	PCT of System ONS	PCT of SYSTEM OFFS	Jurisdiction	Are adequate ADA-compliant mobility device landing pads provided?	Sidewalks and Bus Stop Connectivity	Near at-grade railroad crossing?	Posted speed limit 45 mph or above?	Including both sides of road, total auto lanes	Nearest protected pedestrian crossing opportunity within sight	Bus stop pull-out space	Is a stopped bus an obstruction? To what?	Poor sight distance?	Adequate "No Parking Zone"?
RTA 10	Northbound, Southbound	Pismo Beach Premium Outlets	3.74%	3.20%	Pismo Beach	No mobility device landing pad, except for busses stopped at shelter	Sidewalk	No	No, 30	5	Intersection	Sidewalk and loading zone≥ 9' wide	No	For traffic entering roadway from cross-streets, driveways, or parking spaces	Multiple buses, 172' total
RTA 10	Northbound, Southbound	El Camino Real at Halcyon	2.26%	1.70%	Arroyo Grande	Mobility Device Landing Pad	Access to handicap parking spaces only	No	No, 35	2	Mid-block crosswalk	Sidewalk & loading zone < 9'	Yes: Traffic, Business driveway, Crosswalk, Parked vehicle(s)	For pedestrians using crosswalks	No, 0'
RTA 10	Northbound, Southbound	S. Bradley at Jones	1.48%	1.82%	Santa Maria	No mobility device landing pad (unless bus stops crookedly between bus stop pole and bu bay)	Sidewalk	No	No, 30	2	Intersection	Sidewalk & loading zone < 9'	Yes: Traffic (if stopped at bus stop pole)	For traffic entering roadway from cross-streets, driveways, or parking spaces (if stopped at bus stop pole)	No, 54' in bus bay & Yes 121' at bus stop pole
RTA 10	Southbound	Higuera at South	0.35%	0.06%	SLO City	7'11" deep mobility device landing pad	Obstructed by bus stop amenities	No	No, 30	5	Intersection	Sidewalk & loading zone < 9'	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 80'
RTA 10	Northbound, Southbound	Nicholson at E. Cypress	0.32%	0.06%	Santa Maria	No mobility device landing pad	Disconnected Sidewalk	No	No	2	None	Sidewalk & loading zone < 9'	Yes: Traffic	Yes, from curve	No, 52'
RTA 10	Northbound	Nipomo High School	0.31%	0.19%	SLO County	No mobility device landing pad	No Sidewalk	No	Yes, 45	4	None	Road shoulder without a sidewalk	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 10	Southbound	Thompson at Branch	0.30%	0.40%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 35	3	Intersection	Road shoulder without a sidewalk	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 10	Northbound	S. Higuera at Suburban	0.23%	0.55%	SLO City	Obstructed by middle front panel of shelter	Sidewalk	No	Yes, 45	5	Intersection	Sidewalk and loading zone≥ 9' wide, Bus Bay	No	For pedestrians using crosswalks	No, 80'
RTA 10	Northbound	N. Thompson at Hwy 101	No Match	No Match	SLO County	No mobility device landing pad	No Sidewalk	No	Yes, 50	2	None	Road shoulder without a sidewalk	Yes: Traffic	Yes, from hill	No, 0'
RTA 10	Southbound	N. Thompson at Hwy 101	No Match	No Match	SLO County	No mobility device landing pad	No Sidewalk	No	Yes, 50	2	None	Road shoulder without a sidewalk	Yes: Traffic, Business Driveway	Yes, from hill	No, 0'

Problem	No mobility device landing pad	No Sidewalk	Near at-grade railroad crossing	High Speed Traffic	Wide pedestrian crossings	No Pedestrian Crossing Opportunity	Inadequate pull-out space	Stopped bus obstructs traffic	Poor sight distance	Inadequate "No Parking" Zone
Reccomendation	Plan mobility device landing pad, or move stop serve as flag stop, or end service to stop, or maintain status quo	Plan sidewalk, or move stop, serve as flag stop, or end service to stop, or maintain status quo	Consider moving stop or ending service to stop, or maintaining status quo	Consider lowering speed limit, moving stop, or ending service to stop, or maintaining status quo	Consider narrowing pedestrian street crossing, or moving stop, or ending service to stop, or maintaining status quo	Consider installing pedestrian protected crossing, or moving stop, or ending service to stop, or maintaining status quo	Consider redesigning stop, moving stop, or ending service to stop, or maintaining status quo	Consider redesigning stop, moving stop, or ending service to stop, or maintaining status quo	Consider redesigning stop, moving stop, or ending service to stop, or maintaining status quo	Consider planning additional "No Parking" space, or redesigning stop, moving stop, or ending service to stop, o maintaining status quo
Problem	Unsatisfactory Mobility Device Landing Pad	Disconnected Sidewalk								
Reccomendation		Plan connecting sidewalk, or move stop, serve as flag stop, or end service to stop, or maintain status quo								
Problem	Obstructed mobility device landing pad	Constricted, limited, or cracked sidewalk								
Reccomendation	Remove landing pad obstructions, or maintain	Remove obstructions from sidewalks and/or Plan sidewalk repair, or move stop, or end service to stop, or maintain status quo								

RTA 12/14 Bus Stops without ADA Mobility Device Landing Pads and/or Accessible Connected Throughways - 2013 Assessment

RTA 12/14 Bus Stops without ADA Mobility Device Landing Pads and/or Accessible Connected Throughways - 2013 Assessment

						ADA Accessible Landing Pads & Sidewalks		Pedestrian Crossings				Pull-out Space, Traffic Impact, and Sight Distance			
						Mobility Device Landing Pad	Connected Sidewalk	Railroad X-ing	Speed Limit	# of Lanes	Nearest Crossing	Pull-out space	Bus as Obstruction	Sight Distance	"No Parking"
		Bus Stop Name	PCT of System ONS	PCT of SYSTEM OFFS	Jurisdiction	Are adequate ADA-compliant mobility device landing pads provided?	Sidewalks and Bus Stop Connectivity	Near at-grade railroad crossing?	Posted speed limit 45 mph or above?	Including both sides of road, total auto lanes	Nearest protected pedestrian crossing opportunity within sight	Bus stop pull-out space	Is a stopped bus an obstruction? To what?	Poor sight distance?	Adequate "No Parking Zone"?
RTA 12	Bidirectional	Morro Bay Park	1.03%	2.45%	Morro Bay	No mobility device landing pad, except for busses stopped at shelter	Yes	No	No	2	Intersection	Sidewalk and loading zone ≥ 9' wide	Yes: Traffic	No	Yes
RTA 12	Clockwise Loop	10th at Santa Ynez	0.65%	0.76%	SLO County	No mobility device landing pad	Disconnected Sidewalk	No	No, 30	2	None	Road shoulder without a sidewalk	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 43'
RTA 12	Clockwise Loop	Pine at LOVR	0.53%	0.39%	SLO County	No mobility device landing pad	No Sidewalk	No	No	2	None	Road shoulder without a sidewalk	Yes: Traffic	Yes: from hill	No, 0'
RTA 12	Clockwise Loop	Ramona at 7th	0.39%	0.23%	SLO County	No mobility device landing pad	No Sidewalk	No	No	2	Intersection	Road shoulder without a sidewalk	Yes: Traffic	Yes: from hill	No, 0'
RTA 12	Clockwise Loop	Pine at Loma	0.35%	0.25%	SLO County	No mobility device landing pad	No Sidewalk	No	No	2	None	Road shoulder without a sidewalk	Yes: Traffic	No	No, 105' (midblock)
RTA 12	Clockwise Loop	Santa Ysabel at 15th (EB)	0.27%	0.03%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 35	2	Intersection	Road shoulder without a sidewalk	Yes: Traffic, Residential driveway	No	No, 0'
RTA 12	Clockwise Loop	Santa Ysabel at 7th	0.24%	0.08%	SLO County	No mobility device landing pad	Yes	No	No	2	Intersection	Sidewalk & loading zone < 9'	Yes: Traffic	Yes: from hill	No, 0'
RTA 12	Clockwise Loop	11th at Ramona	0.24%	0.41%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 35	2	None	Road shoulder without a sidewalk	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 12	Clockwise Loop	11th at El Morro	0.23%	0.43%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 35	2	Intersection	Road shoulder without a sidewalk	Yes: Traffic, Parked vehicle(s)	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 12	Clockwise Loop	7th at El Morro	0.19%	0.14%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 35	2	None	Road shoulder without a sidewalk	Yes: Traffic, Residential driveway	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 12	Clockwise Loop	2nd at Santa Maria	0.18%	0.14%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 25	2	None	Road shoulder without a sidewalk	Yes: Traffic, Residential driveway	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 12	Northbound	South Bay at Quintana	0.15%	0.10%	Morro Bay	Yes	No Sidewalk	No	No, 40	2	None	Road shoulder without a sidewalk, Bus Bay	No	Yes: from curve	No, 60'
RTA 12	Clockwise Loop	Santa Ysabel at 15th (WB)	0.12%	0.33%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 35	2	Intersection	Road shoulder without a sidewalk	No	For pedestrians using crosswalks	No, 0'
RTA 12/14	Souuthbound	Kansas at Hwy 1	0.11%	0.05%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 35	2	None	Road shoulder without a sidewalk	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 12	Southbound	South Bay at Quintana	0.04%	0.08%	Morro Bay	Yes	No Sidewalk	No	No, 40	2	None	Road shoulder without a sidewalk, Bus Bay	No	Yes: from curve	No, 55'
RTA 12/14	Northbound	CA Men's Colony	0.01%	0.06%	CA Men's Colony	Yes, if parking spaces removed	Yes	No	No	1	None	Sidewalk & loading zone < 9'	Yes: Traffic, Parked vehicle(s)	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 12/14	Northbound	Santa Rosa at Murray	No Match	No Match	SLO City	No mobility device landing pad	Sidewalk	No	No, 35	5	Intersection	Sidewalk & loading zone < 9'	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'

Problem	No mobility device landing pad	No Sidewalk	Near at-grade railroad crossing	High Speed Traffic	Wide pedestrian crossings	No Pedestrian Crossing Opportunity	Inadequate pull-out space	Stopped bus obstructs traffic	Poor sight distance	Inadequate "No Parking" Zone
Reccomendation	Plan mobility device landing pad, or move stop, serve as flag stop, or end service to stop, or maintain status quo	Plan sidewalk, or move stop, serve as flag stop, or end service to stop, or maintain status quo	Consider moving stop or ending service to stop, or maintaining status quo	Consider lowering speed limit, moving stop, or ending service to stop, or maintaining status quo	Consider narrowing pedestrian street crossing, or moving stop, or ending service to stop, or maintaining status quo	Consider installing pedestrian protected crossing, or moving stop, or ending service to stop, or maintaining status quo	Consider redesigning stop, moving stop, or ending service to stop, or maintaining status quo	Consider redesigning stop, moving stop, or ending service to stop, or maintaining status quo	Consider redesigning stop, moving stop, or ending service to stop, or maintaining status quo	Consider planning additional "No Parking" space, or redesigning stop, moving stop, or ending service to stop, or maintaining status quo
Problem	**Unsatisfactory Mobility Device Landing Pad**	**Disconnected Sidewalk**								
Reccomendation		Plan connecting sidewalk, or move stop, serve as flag stop, or end service to stop, or maintain status quo								
Problem	**Obstructed mobility device landing pad**	**Constricted, limited, or cracked sidewalk**								
Reccomendation	Remove landing pad obstructions, or maintain status quo	Remove obstructions from sidewalks and/or Plan sidewalk repair, or move stop, or end service to stop, or maintain status quo								

RTA 15 Bus Stops without ADA Mobility Device Landing Pads and/or Accessible Connected Throughways - 2013 Assessment

RTA 15 Bus Stops without ADA Mobility Device Landing Pads and/or Accessible Connected Throughways - 2013 Assessment

						ADA Accessible Landing Pads & Sidewalks		Pedestrian Crossings				Pull-out Space, Traffic Impact, and Sight Distance			
						Mobility Device Landing Pad	Connected Sidewalk	Railroad X-ing	Speed Limit	# of Lanes	Nearest Crossing	Pull-out space	Bus as Obstruction	Sight Distance	"No Parking"
		Bus Stop Name	PCT of System ONS	PCT of SYSTEM OFFS	Jurisdiction	Are adequate ADA-compliant mobility device landing pads provided?	Sidewalks and Bus Stop Connectivity	Near at-grade railroad crossing?	Posted speed limit 45 mph or above?	Including both sides of road, total auto lanes	Nearest protected pedestrian crossing opportunity within sight	Bus stop pull-out space	Is a stopped bus an obstruction? To what?	Poor sight distance?	Adequate "No Parking Zone"?
RTA 15	Bidirectional	MORRO BAY PARK	0.63%	0.65%	Morro Bay	No mobility device landing pad, except for busses stopped at shelter	Yes	No	No	2	Intersection	Sidewalk and loading zone ≥ 9' wide	Yes: Traffic	No	Yes
RTA 15	Southbound	BURTON @ ARDATH	0.14%	0.00%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 30	2	None	Sidewalk & loading zone < 9'	Yes: Traffic	No	No, 0'
RTA 15	Southbound	OCEAN @ CAYUCOS PIER (SB)	0.09%	0.06%	SLO County	No mobility device landing pad	No Sidewalk	No	No	2	Intersection	Road shoulder without a sidewalk	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 15	Southbound	OCEAN @ 9TH (SB)	0.09%	0.01%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 35	2	None	Road shoulder without a sidewalk	Yes: Traffic, Business Driveway	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 15	Southbound	HWY 1 @ SAN JACINTO	0.08%	0.05%	Morro Bay	No mobility device landing pad	Yes	No	Yes, 55	5	Intersection	Sidewalk and loading zone ≥ 9' wide, Bus Bay	No	No	No, 0'
RTA 15	Southbound	OCEAN @ 3RD (SB)	0.08%	0.03%	SLO County	No mobility device landing pad	No Sidewalk	No	No	2	Intersection	Road shoulder without a sidewalk	No	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 15	Northbound	CAYUCOS @ OCEAN (NB)	0.07%	0.03%	SLO County	No mobility device landing pad	No Sidewalk	No	No	2	Intersection	Road shoulder without a sidewalk	No	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 15	Southbound	ARDATH @ HWY 1	0.07%	0.00%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 30	2	None	Road shoulder without a sidewalk	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 15	Southbound	Not in printed schedule "MAIN @ ARLINGTON"	0.06%	0.00%	SLO County	No mobility device landing pad	Yes	No	No	2	Intersection	Sidewalk and loading zone ≥ 9' wide	Yes: Crosswalk	For pedestrians using crosswalks; For traffic entering roadway from cross-streets, driveways, o parking spaces	No, 41'
RTA 15	Southbound	BURTON @ CAMBRIA PINES LODGE	0.05%	0.00%	SLO County	No mobility device landing pad	No Sidewalk	No	No	2	None	Road shoulder without a sidewalk	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 15	Southbound	MOONSTONE @ WINDSOR	0.05%	0.00%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 35	2	None	Road shoulder without a sidewalk	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 15	Southbound	SOUTH OCEAN @ OLD CREEK	0.03%	0.04%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 25	2	None	Road shoulder without a sidewalk, Bus Bay	No	No	No, 0'
RTA 15	Northbound	Not on printed schedule "MAIN @ SKATE PARK	0.03%	0.06%	SLO County	No mobility device landing pad	No Sidewalk	No	No	3	Intersection	Road shoulder without a sidewalk	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 15	Southbound	MAIN @ VETS HALL	0.03%	0.00%	SLO County	No mobility device landing pad	Yes	No	No	3	Intersection	Sidewalk and loading zone ≥ 9' wide	Yes: Traffic, Business Driveway	For traffic entering roadway from cross-streets, driveways, or parking spaces	Yes
RTA 15	Northbound	Not on printed schedule "BURTON @ YORKSHIRE"	0.02%	0.04%	SLO County	No mobility device landing pad	No Sidewalk	No	No	2	None	Road shoulder without a sidewalk	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 15	Northbound	MOONSTONE @ WINDSOR	0.01%	0.08%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 35	2	None	Road shoulder without a sidewalk	Yes: Traffic	Yes: from curve	No, 0'
RTA 15	Northbound	ARDATH @ HWY 1	0.01%	0.03%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 30	2	None	Road shoulder without a sidewalk	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 15	Northbound	BURTON @ ARDATH	0.00%	0.14%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 30	2	None	Sidewalk & loading zone < 9'	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 15	Northbound	BURTON @ MAIN ST.	0.00%	0.13%	SLO County	No mobility device landing pad	Yes	No	No	2	Intersection	Sidewalk and loading zone ≥ 9' wide	Yes: Traffic, Business Driveway	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 37'
RTA 15	Northbound	OCEAN @ 8TH (NB)	0.00%	0.06%	SLO County	No mobility device landing pad	No Sidewalk	No	No	2	None	Road shoulder without a sidewalk	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 15	Southbound	MOONSTONE @ SAN SIMEON PINES LODGE	0.00%	0.06%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 25	2	None	Road shoulder without a sidewalk	Yes: Traffic	Yes: from curve	No, 0'
RTA 15	Northbound	OCEAN @ 3RD (NB)	0.00%	0.05%	SLO County	No mobility device landing pad	Yes	No	No, 35	2	Intersection	Sidewalk and loading zone ≥ 9' wide	Yes: Business driveway	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 35'
RTA 15	Northbound	Not on printed schedule "MAIN @ TAMSON (NB)"	0.00%	0.03%	SLO County	No mobility device landing pad	Yes	No	No	3	None	Sidewalk & loading zone < 9'	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 15	Northbound	CASTILLO @ OTTER (NB ONLY)	0.00%	0.03%	SLO County	No mobility device landing pad	Yes	No	No	2	None	Sidewalk and loading zone ≥ 9' wide	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 15	Northbound	SOUTH OCEAN @ OLD CREEK	0.00%	0.02%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 25	2	None	Road shoulder without a sidewalk	Yes: Traffic	Yes: from curve	No, 0'
RTA 15	Northbound	Not on printed schedule "MAIN @ CORNWALL"	0.00%	0.01%	SLO County	Obstructed by "Old Store Station" bench	Yes	No	No	2	Mid-block crosswalk	Sidewalk and loading zone ≥ 9' wide	Yes: Traffic, Business Driveway	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 15	Northbound	Not on printed schedule: "MOONSTONE @ FIRESIDE INN"	0.00%	0.00%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 25	2	None	Road shoulder without a sidewalk	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 15	Southbound	Not in printed schedule "MOONSTONE @ MARINERS INN (SB)"	0.00%	0.00%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 25	2	None	Road shoulder without a sidewalk	Yes: Traffic, Parked vehicle(s)	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 15	Northbound	Not on printed schedule "MOONSTONE @ MARINERS INN (NB)"	0.00%	0.00%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 25	2	None	Road shoulder without a sidewalk, Bus Bay	No	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 15	Northbound	MAIN @ BLUEBIRD INN	0.00%	0.00%	SLO County	No mobility device landing pad	No Sidewalk	No	No	2	Mid-block crosswalk	Sidewalk & loading zone < 9'	Yes: Traffic	No	No, 0'
RTA 15	Southbound	Not on printed schedule: "MOONSTONE @ CASTLE INN"	0.00%	0.00%	SLO County	No mobility device landing pad	No Sidewalk	No	No, 25	2	None	Road shoulder without a sidewalk	Yes: Parked vehicle(s)	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
RTA 15	Southbound	BURTON @ BURTON CIR.	No Match	No Match	SLO County	No mobility device landing pad	No Sidewalk	No	No	2	None	Road shoulder without a sidewalk	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	Yes

Problem	No mobility device landing pad	No Sidewalk	Near at-grade railroad crossing	High Speed Traffic	Wide pedestrian crossings	No Pedestrian Crossing Opportunity	Inadequate pull-out space	Stopped bus obstructs traffic	Poor sight distance	Inadequate "No Parking" Zone
Reccomendation	Plan mobility device landing pad, or move stop, serve as flag stop, or end service to stop, or maintain status quo	Plan sidewalk, or move stop, serve as flag stop, or end service to stop, or maintain status quo	Consider moving stop or ending service to stop, or maintaining status quo	Consider lowering speed limit, moving stop, or ending service to stop, or maintaining status quo	Consider narrowing pedestrian street crossing, or moving stop, or ending service to stop, or maintaining status quo	Consider installing pedestrian protected crossing, or moving stop, or ending service to stop, or maintaining status quo	Consider redesigning stop, moving stop, or ending service to stop, or maintaining status quo	Consider redesigning stop, moving stop, or ending service to stop, or maintaining status quo	Consider redesigning stop, moving stop, or ending service to stop, or maintaining status quo	Consider planning additional "No Parking" space, or redesigning stop, moving stop, or ending service to stop, or maintaining status quo

Problem	Unsatisfactory Mobility Device Landing Pad	Disconnected Sidewalk
Reccomendation		Plan connecting sidewalk, or move stop, serve as flag stop, or end service to stop, or maintain status quo

Problem	Obstructed mobility device landing pad	Constricted, limited, or cracked sidewalk
Reccomendation	Remove landing pad obstructions, or maintain status quo	Remove obstructions from sidewalks and/or Plan sidewalk repair, or move stop, or end service to stop, or maintain status quo

Paso Express Bus Stops without ADA Mobility Device Landing Pads and/or Accessible Connected Throughways - 2013 Assessment

Paso Express Bus Stops without ADA Mobility Device Landing Pads and/or Accessible Connected Throughways - 2013 Assessment

						ADA Accessible Landing Pads & Sidewalks		Pedestrian Crossings				Pull-out Space, Traffic Impact, and Sight Distance			
						Mobility Device Landing Pad	Connected Sidewalk	Railroad X-ing	Speed Limit	# of Lanes	Nearest Crossing	Pull-out space	Bus as Obstruction	Sight Distance	"No Parking"
		Bus Stop Name	PCT of System ONS	PCT of SYSTEM OFFS	Jurisdiction	Are adequate ADA-compliant mobility device landing pads provided?	Sidewalks and Bus Stop Connectivity	Near at-grade railroad crossing?	Posted speed limit 45 mph or above?	Including both sides of road, total auto lanes	Nearest protected pedestrian crossing opportunity within sight	Bus stop pull-out space	Is a stopped bus an obstruction? To what?	Poor sight distance?	Adequate "No Parking Zone"?
B	Counter-clockwise loop	Stoney Creek at Creston	0.42%	0.25%	Paso Robles	Obstructed by bus stop amenities	Sidewalk	No	No, 25	2	None	w/ Sidewalk & loading zone > 9' wide	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 75'
B	Counter-clockwise loop	Creston at Nickerson	0.36%	0.00%	Paso Robles	No mobility device landing pad	Disconnected Sidewalk, no ramp into crosswalk	No	No, 35	3	Mid-block crosswalk	w/ Sidewalk & loading zone < 9' wide	Yes: Traffic	For Pedestrians using crosswalks	No, 75'
A&B	Northbound	Spring at 28th	0.32%	0.02%	Paso Robles	Mobility Device Landing Pad	Sidewalk, many pebbles	No	No, 25	3	Intersection	w/ Sidewalk & loading zone > 9' wide	No	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 53'
A&B	Clockwise loop	Riverside at Ysabel	0.27%	0.06%	Paso Robles	No mobility device landing pad	Sidewalk	No	No, 25	2	Intersection	Sidewalk & loading zone < 9'	No	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 54'
B	Counter-clockwise loop	Creston at Scott	0.19%	0.34%	Paso Robles	No mobility device landing pad	Sidewalk	No	No, 35	3	Intersection, Mid-block crosswalk	Sidewalk & loading zone < 9'	No	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 88'
B	Counter-clockwise loop	Creston at Oak Meadow	0.19%	0.11%	Paso Robles	No mobility device landing pad	Sidewalk	No	Yes, 45	5	Intersection	Sidewalk & loading zone < 9'	Yes: Traffic	For pedestrians using crosswalks; For traffic entering roadway from cross-streets, driveways, c parking spaces	No, 27'
B	Counter-clockwise loop	Spring at 4th	0.17%	0.19%	Paso Robles	No mobility device landing pad	Sidewalk	No	No, 30	3	Intersection	Sidewalk & loading zone < 9'	Yes: Traffic	For pedestrians using crosswalks; For traffic entering roadway from cross-streets, driveways, c parking spaces	No, 53'
B	Counter-clockwise loop	Spring at 16th	0.15%	0.19%	Paso Robles	7'10.5" deep mobility device landing pad, obstructed by bus stop amenities	No Sidewalk	No	No, 25	3	Intersection	w/ Sidewalk & loading zone > 9' wide	Yes: Traffic	For pedestrians using crosswalks; For traffic entering roadway from cross-streets, driveways, c parking spaces	No, 57'
B	Counter-clockwise loop	Creston at Walnut	0.15%	0.13%	Paso Robles	Obstructed by bus stop amenities	Disconnected Sidewalk	No	No, 35	3	Mid-block crosswalk	w/ Sidewalk & loading zone > 9' wide	No	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 67'
A	Clockwise loop	Creston at Melody	0.15%	0.08%	Paso Robles	No mobility device landing pad	Sidewalk	No	No, 35	5	Intersection	w/ Sidewalk & loading zone < 9' wide	Yes: Traffic	For Pedestrians using crosswalks	No, 61'
A	Clockwise loop	Creston at Bolen	0.13%	0.21%	Paso Robles	Obstructed by bus stop amenities	Sidewalk	No	No, 35	3	Mid-block crosswalk	w/ Sidewalk & loading zone > 9' wide	No	For pedestrians using crosswalks; For traffic entering roadway from cross-streets, driveways, c parking spaces	No, 61'
A	Clockwise loop	Scott at Via Ramona	0.13%	0.11%	Paso Robles	No mobility device landing pad	Sidewalk	No	No, 35	2	Mid-block crosswalk	w/ Sidewalk & loading zone > 9' wide	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 54'
B	Counter-clockwise loop	Airport at Scott	0.13%	0.06%	Paso Robles	No mobility device landing pad	Sidewalk	No	No	2	None	Sidewalk & loading zone < 9'	Yes: Traffic	For Pedestrians using crosswalks	No, 70'
A	Clockwise loop	Spring at 21st	0.13%	0.02%	Paso Robles	No mobility device landing pad	Sidewalk	No	No, 25	3	Intersection	Sidewalk & loading zone < 9'	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 36'
A	Clockwise loop	Spring at 2nd	0.13%	0.00%	Paso Robles	7'6" deep mobility device landing pad	Sidewalk	No	No, 30	5	Intersection	Sidewalk & loading zone < 9'	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	Yes
A&B	Clockwise loop	Oak at 34th	0.11%	0.00%	Paso Robles	No mobility device landing pad	No Sidewalk	No	No, 25	2	Intersection	w/ Sidewalk & loading zone < 9' wide	No	No	No, 0'
A	Clockwise loop	Fontana at Linne	0.08%	0.08%	Paso Robles	Mobility Device Landing Pad	Disconnected Sidewalk	No	No	2	None	w/ Sidewalk & loading zone > 9' wide	No	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
B	Counter-clockwise loop	Oak at 1st	0.06%	0.25%	Paso Robles	No mobility device landing pad	Sidewalk	No	No	2	Intersection	w/ Sidewalk & loading zone > 9' wide	No	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 55'
A	Clockwise loop	Airport at Scott	0.06%	0.12%	Paso Robles	No mobility device landing pad	Sidewalk	No	No	2	None	w/ Sidewalk & loading zone < 9' wide	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
B	Counter-clockwise loop	Scott at Westfiled	0.04%	0.11%	Paso Robles	7'10" deep mobility device landing pad	No Sidewalk	No	No	2	Intersection	w/ Sidewalk & loading zone > 9' wide	No	For pedestrians using crosswalks; For traffic entering roadway from cross-streets, driveways, c parking spaces	No, 55'
B	Counter-clockwise loop	Niblick at Nicklaus	0.04%	0.02%	Paso Robles	No mobility device landing pad	Sidewalk	No	No, 25	4	Intersection	w Sidewalk & loading zone > 9 wide, Bus Bay	Yes: Traffic	No	Yes
B	Counter-clockwise loop	Riverside at 20th	0.04%	0.02%	Paso Robles	No mobility device landing pad	Sidewalk	No	No, 25	2	Mid-block crosswalk	Sidewalk & loading zone < 9'	No	For pedestrians using crosswalks; For traffic entering roadway from cross-streets, driveways, c parking spaces	No, 62'
A	Clockwise loop	Sherwood at Commerce	0.04%	0.00%	Paso Robles	No mobility device landing pad	Sidewalk	No	No	3	None	w/ Sidewalk & loading zone < 9' wide	No	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 50'
A&B	Southbound	Spring at 30th	0.02%	0.42%	Paso Robles	Mobility Device Landing Pad	Unobstructed width < 3 feet	No	No, 25	3	Intersection	Sidewalk & loading zone < 9'	Yes: Traffic	For pedestrians using crosswalks; For traffic entering roadway from cross-streets, driveways, c parking spaces	No, 56'
A	Clockwise loop	Creston at Lana	0.02%	0.10%	Paso Robles	No mobility device landing pad	Sidewalk, Uplifting and cracks	No	Yes, 45	5	Intersection	w/ Sidewalk & loading zone < 9' wide	No	For pedestrians using crosswalks; For traffic entering roadway from cross-streets, driveways, c parking spaces	Yes
B	Counter-clockwise loop	Creston at Capitol Hill	0.02%	0.04%	Paso Robles	No mobility device landing pad	Sidewalk	No	No, 35	2	Intersection	w/ Sidewalk & loading zone > 9' wide	No	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 46'
B	Counter-clockwise loop	Creston at Shannon Hill	0.02%	0.02%	Paso Robles	No mobility device landing pad	Disconnected Sidewalk	No	No, 35	2	None	w/ Sidewalk & loading zone < 9' wide	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 55'
A	Clockwise loop	Riverside at 14th	0.00%	0.02%	Paso Robles	Mobility Device Landing Pad	Disconnected Sidewalk	No	No, 35	2	Intersection	w/ Sidewalk & loading zone > 9' wide	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 43'
A	Clockwise loop	Rambouillet at Torrey Pines	0.00%	0.02%	Paso Robles	No mobility device landing pad	Sidewalk	No	No	2	None	Sidewalk & loading zone < 9'	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
B	Counter-clockwise loop	Rambouillet at Wade	0.00%	0.00%	Paso Robles	No mobility device landing pad	Sidewalk	No	No	2	Intersection	Sidewalk & loading zone < 9'	Yes: Traffic	For Pedestrians using crosswalks	No, 55'
B	Counter-clockwise loop	Riverside at 17th	0.00%	0.00%	Paso Robles	No mobility device landing pad	Sidewalk	No	No, 25	3	None	Sidewalk & loading zone < 9'	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
B	Counter-clockwise loop	Airport at Parkview	No Match	No Match	Paso Robles	No mobility device landing pad	Sidewalk	No	No, 35	2	None	Sidewalk & loading zone < 9'	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
B	Counter-clockwise loop	7th at Park	No Match	No Match	Paso Robles	No mobility device landing pad	Sidewalk	No	No	2	Intersection	w/ Sidewalk & loading zone > 9' wide	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	No, 0'
A	Clockwise loop	24th at Spring	No Match	No Match	Paso Robles	7'11" deep mobility device landing pad	Sidewalk	No	No, 25	2	Intersection	Sidewalk & loading zone < 9'	Yes: Traffic	For traffic entering roadway from cross-streets, driveways, or parking spaces	Yes

Problem	No mobility device landing pad	No Sidewalk	Near at-grade railroad crossing	High Speed Traffic	Wide pedestrian crossings	No Pedestrian Crossing Opportunity	Inadequate pull-out space	Stopped bus obstructs traffic	Poor sight distance to/from bus stop	Inadequate "No Parking" Zone
Reccomendation	Plan mobility device landing pad, or move stop, serve as flag stop, or end service to stop, or maintain status quo	Plan sidewalk, or move stop, serve as flag stop, or end service to stop, or maintain status quo	Consider moving stop or ending service to stop, or maintaining status quo	Consider lowering speed limit, moving stop, or ending service to stop, or maintaining status quo	Consider narrowing pedestrian street crossing, or moving stop, or ending service to stop, or maintaining status quo	Consider installing pedestrian protected crossing, or moving stop, or ending service to stop, or maintaining status quo	Consider redesigning stop, moving stop, or ending service to stop, or maintaining status quo	Consider redesigning stop, moving stop or ending service to stop, or maintaining status quo	Consider redesigning stop, moving stop, or ending service to stop, or maintaining status quo	Consider planning additional "No Parking" space, or redesigning stop, moving stop, or ending service to stop, or maintaining status quo
Problem	Unsatisfactory Mobility Device Landing Pad	Disconnected Sidewalk								
Reccomendation		Plan connecting sidewalk, or move stop, serve as flag stop, or end service to stop, or maintain status quo								
Problem	Obstructed mobility device landing pad	Constricted, limited, or cracked sidewalk								
Reccomendation	Remove landing pad obstructions, or maintain status quo	Remove obstructions from sidewalks and/or Plan sidewalk repair, or move stop, or end service to stop, or maintain status quo								

APPENDIX C: RTA Fixed-route Schedules (timetables, bus stop maps and diagrams)

Full list of RTA 9 stops. Schedule on other side.

Southbound *Hacia al Sur*

Mission at 14th, Limited Service
Cuesta College North, Limited Service
North County Transportation Center (Pine at 8th, Amtrak)
Spring at 4th

Timed Stops

1st at Oak
Theatre at Theatre (Chili's)
Target Shopping Center
Theatre at Rancho Paso
Twin Cities Hospital
Las Tablas Park and Ride

ECR (El Camino Real) at Atalaya
ECR at Del Rio (Mission Oaks Plaza)
ECR at San Benito
ECR at Cynthia (Kennedy Club)
ECR at San Anselmo (Kmart)
ECR at San Anselmo (Lutheran Church)
ECR at Rosario
ECR at Entrada
Atascadero Transit Center
ECR at Hwy 41 (Carwash)
ECR at Pueblo
ECR at Junipero (Albertson's)
ECR at Plata (Glen Oaks Plaza)
ECR at Santa Rosa (Miner's Hardware)
ECR at El Bordo (Post Office)
ECR at Maple
ECR at Patria Circle
Viejo Camino at Bocina (Bordeaux Apts)
Viejo Camino at Santa Barbara
ECR at Santa Clara
ECR at Carmel
ECR at Santa Margarita (Country Care)
ECR at Pine (Garden Farms)
ECR at Encina
ECR (El Camino Real) at Maria
Monterey at Grand
Grand at Abbott Limited Service
Grand at McCollum Limited Service
Cal Poly PAC, Limited Service
Cal Poly Library, Limited Service
Santa Rosa at Foothill, Limited Service

Government Center (Osos and Palm)

See timetable for Limited Service details

SAN MIGUEL
PASO ROBLES
TEMPLETON
ATASCADERO
SANTA MARGARITA
SAN LUIS OBISPO

Northbound *Hacia al Norte*

Mission at 14th, Limited Service
Cuesta College North, Limited Service
North County Transportation Center (Pine at 8th, Amtrak)
Spring at 5th
Spring at 2nd
South Vine at 1st (Gateway Center)
Theatre at Theatre (River Lodge)

Las Tablas Park and Ride
Twin Cities Hospital (Las Tablas at Posada)
ECR (El Camino Real) at Santa Cruz
ECR at Atalaya
ECR at Del Rio (Mission Oaks Plaza)
ECR at San Benito
ECR at Maya (Kennedy Club)
ECR at San Anselmo (Kmart)
ECR at San Jacinto
ECR at Rosario (Police Station)
ECR at Traffic Way
Atascadero Transit Center
ECR at Highway 41 (Vons)
ECR at Pueblo
ECR at Palomar
ECR at Solano
ECR at Principal
ECR at El Bordo (Post Office)
ECR at Musselman
ECR at Avenida Maria (Hidden Oaks Village)
Viejo Camino at Bocina (Bordeaux Apts)
Viejo Camino at Santa Barbara
ECR at Santa Clara
ECR at Carmel
ECR at Santa Margarita (Country Care)
ECR at Pine (Garden Farms)
ECR at Encina
ECR (El Camino Real) at Maria
Monterey at Peach Tree Inn
Grand at Wilson, Limited Service
Grand at McCollum, Limited Service
Cal Poly PAC, Limited Service
Cal Poly Library, Limited Service
Santa Rosa at Foothill, Limited Service
Santa Rosa at Murray, Limited Service
Government Center (Osos and Palm)
Cal Poly Library, Limited Service

Timed Stops

Additional weekday service from Paso Robles to Fort Hunter Liggett is available via RTA and MST #83. See the separate brochure for Route 83.

El servicio adicional entre semana de Paso Robles a San Miguel, a Lockwood y a Fort Hunter Liggett está disponible vía RTA and MST #83. Vea el folleto separado la Ruta 83.

CASH FARES *TARIFAS*	San Luis Obispo	Santa Margarita Atascadero	Templeton	Paso Robles	San Miguel
San Luis Obispo	$1.50	$2.00	$2.50	$3.00	$3.00
Santa Margarita Atascadero	$2.00	$1.50	$1.50	$2.00	$2.50
Templeton	$2.50	$1.50	$1.50	$1.50	$2.00
Paso Robles	$3.00	$2.00	$1.50	$1.50	$2.00
San Miguel	$3.00	$2.50	$2.00	$2.00	$1.50

Regional Day Pass: $5.00

Regional Day Pass	**$5.00**
RTA 31-Day Pass	**$44 Regular/$22 Discount**
Regional 31-Day Pass	**$64 Regular/$32 Discount**
Stored Value Card	**$15 Value**
7-Day Pass	**$14.00**

See the Ride Guide for detailed pass & fare information.
Vea el guia de pasajero para detalles sobre pases y informacion sobre tarifas.

Discount Fares: half the regular cash fares for Seniors (65-79), Disabled and Medicare Card Holders, Students (K-12, RTA Only)
Precios descuentos: Mayores (65-79), Estudiantes (K-12), Discapacitados y personas con tarjeta de Medicare.

Children 44" and under ride free with paying adult
Niños debajo de 44 pulgadas viajan gratis al ser acompañados por un pasajero pagando la tarifa regular.

Cuesta North Students Ride RTA 9, Paso Express and Atascadero Transit FREE.
Just show your current class schedule or student I.D.

Please carry exact fare. No change is given.
Favor de traer la tarifa exacta.

Holidays / *Dias festivos*

No Service / *No Servicio:*
Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day, and New Year's Day

Reduced Schedule (Sunday Service)
Servicio reducio (Horario de Domingo):
Christmas Eve, New Year's Eve, the day after (*dia despues de*) Thanksgiving, the day after (*dia despues de*) Christmas (Dec. 26th), the day after (*dia despues de*) New Year's Day (Jan. 2nd)

9 PASO ROBLES (Limited SAN MIGUEL service) to SAN LUIS OBISPO

rta REGIONAL TRANSIT AUTHORITY

Effective/*Comenzando*
Sept 23, 2014

Information/*Información*
541-2228 or slorta.org

Bold = PM | **RTA Route 9 Timed Stops. Full list of RTA 9 stops on other side.** | **Bold = PM**

MONDAY – FRIDAY *LUNES A VIERNES*

SOUTHBOUND *Hacia al sur* Paso Robles to San Luis Obispo

	SAN MIGUEL	PASO ROBLES			TEMPLETON		ATASCADERO		SANTA MARGARITA	SAN LUIS OBISPO	
	Mission at 14th	Cuesta College North	Pine at 8th	Target Shopping Center	Twin Cities Hospital	Las Tablas Park & Ride	Atascadero Transit Center	Viejo Camino at Bocina	ECR at Encina	Cal Poly Library	Government Center (Osos at Palm)
EXP	-	-	5:30	-	-	5:38	5:48	-	-	6:13	6:22
	-	-	6:01	6:10	6:16	6:18	6:33	6:45	6:54	7:11	7:24
EXP	6:21	-	6:35	-	-	6:43	6:53	-	-	7:18	7:27
EXP	-	-	6:50	-	-	6:58	7:08	-	-	7:33	7:42
	-	-	7:01	7:10	7:16	7:18	7:33	7:45	7:54	8:11	8:24
	-	8:00	8:10	8:19	8:25	8:27	8:42	8:54	9:03	-	9:23
	8:22	-	8:43	-	-	-	-	-	-	-	-
	-	9:00	9:10	9:19	9:25	9:27	9:42	9:54	10:03	-	10:23
	-	10:00	10:10	10:19	10:25	10:27	10:42	10:54	11:03	-	11:23
	-	11:00	11:10	11:19	11:25	11:27	11:42	11:54	**12:03**	-	**12:23**
	11:56	-	**12:10**	**12:19**	**12:25**	**12:27**	**12:42**	**12:54**	**1:03**	-	**1:23**
	-	**12:00**	**12:10**	-	-	-	-	-	-	-	-
	-	**1:00**	**1:10**	**1:19**	**1:25**	**1:27**	**1:42**	**1:54**	**2:03**	-	**2:23**
	-	**2:00**	**2:10**	**2:19**	**2:25**	**2:27**	**2:42**	**2:54**	**3:03**	-	**3:23**
	-	**3:00**	**3:10**	**3:19**	**3:25**	**3:27**	**3:42**	**3:54**	**4:03**	-	**4:23**
	-	**4:00**	**4:10**	**4:19**	**4:25**	**4:27**	**4:42**	**4:54**	**5:03**	-	**5:23**
EXP	-	-	**4:20**	-		-	-	-	-	-	**5:00**
	-	**5:00**	**5:10**	**5:19**	**5:25**	**5:27**	**5:42**	**5:54**	**6:03**	-	**6:23**
	5:02	-	**5:27**	-	-	-	-	-	-	-	-
	-	**6:00**	**6:10**	**6:19**	**6:25**	**6:27**	**6:42**	**6:54**	**7:03**	-	**7:23**
	-	**7:00**	**7:10**	**7:19**	**7:25**	**7:27**	**7:42**	**7:54**	**8:03**		**8:23**

Extended evening service from Cuesta College North Campus Mondays through Thursdays.

SATURDAY *sabado*

6:56	-	7:10	7:19	7:25	7:27	7:42	7:54	8:03	-	8:23
-	-	10:10	10:19	10:25	10:27	10:42	10:54	11:03	-	11:23
11:56	-	**12:10**	**12:19**	**12:25**	**12:27**	**12:42**	**12:54**	**1:03**	-	**1:23**
-	-	**3:10**	**3:19**	**3:25**	**3:27**	**3:42**	**3:54**	**4:03**	-	**4:23**
5:56	-	**6:10**	**6:19**	**6:25**	**6:27**	**6:42**	**6:54**	**7:03**	-	**7:23**

SUNDAY *domingo*

7:56	-	8:10	8:19	8:25	8:27	8:42	8:54	9:03	-	9:23
11:56	-	**12:10**	**12:19**	**12:25**	**12:27**	**12:42**	**12:54**	**1:03**	-	**1:23**
3:56	-	**4:10**	**4:19**	**4:25**	**4:27**	**4:42**	**4:54**	**5:03**	-	**5:23**

NORTHBOUND *Hacia al norte* San Luis Obispo to Paso Robles

	SAN LUIS OBISPO			SANTA MARGARITA	ATASCADERO		TEMPLETON		PASO ROBLES			SAN MIGUEL
	Cal Poly Library	Government Center (Osos at Palm)	Cal Poly Library	ECR at Encina	Viejo Camino at Bocina	Atascadero Transit Center	Twin Cities Hospital	Las Tablas Park & Ride	Theatre at Theatre	Pine at 8th	Cuesta College North	Mission at 14th
	-	-	-	-	-	-	-	-	-	6:22	-	6:35
	-	6:33	-	6:47	6:55	7:15	7:30	7:33	7:38	7:47	8:00	-
	-	7:33	-	7:47	7:55	8:08	8:23	8:26	8:31	8:40	8:53	-
	-	8:33	-	8:47	8:55	9:08	9:23	9:26	9:31	9:40	9:53	-
	-	9:33	-	9:47	9:55	10:08	10:23	10:26	10:31	10:40	10:53	-
	-	-	-	-	-	-	-	-	-	11:40	-	11:54
	-	10:33	-	10:47	10:55	11:08	11:23	11:26	11:31	11:40	11:53	-
	-	11:33	-	11:47	11:55	**12:08**	**12:23**	**12:26**	**12:31**	**12:40**	**12:53**	-
	-	**12:33**	-	**12:47**	**12:55**	**1:08**	**1:23**	**1:26**	**1:31**	**1:40**	**1:53**	-
	-	**1:33**	-	**1:47**	**1:55**	**2:08**	**2:23**	**2:26**	**2:31**	**2:40**	**2:53**	-
	-	-	-	-	-	-	-	-	-	**2:50**	-	**3:06**
	2:21	**2:33**	-	**2:47**	**2:55**	**3:08**	**3:23**	**3:26**	**3:31**	**3:40**	**3:53**	-
	-	**3:03**	-	**3:17**	**3:25**	**3:37**	**3:52**	**3:56**	**4:01**	**4:10**	-	-
	3:21	**3:33**	-	**3:47**	**3:55**	**4:08**	**4:23**	**4:26**	**4:31**	**4:40**	**4:53**	-
EXP	-	**4:15**	**4:24**	-	-	**4:50**	-	**5:03**	-	**5:12**	-	-
	4:21	**4:33**	-	**4:47**	**4:55**	**5:08**	**5:23**	**5:26**	**5:31**	**5:40**	**5:53**	-
EXP	-	**5:15**	**5:24**	-	-	**5:50**	-	**6:03**	-	**6:12**	-	**6:28**
	5:21	**5:33**	-	**5:47**	**5:55**	**6:08**	**6:23**	**6:26**	**6:31**	**6:40**	**6:53**	-
	6:21	**6:33**	-	**6:47**	**6:55**	**7:08**	**7:23**	**7:26**	**7:31**	**7:40**	-	-
	-	**7:33**	-	**7:47**	**7:55**	**8:08**	**8:23**	**8:26**	**8:31**	**8:40**	-	-
	-	**8:33**	**8:41**	**8:58**	**9:06**	**9:19**	**9:34**	**9:37**	**9:42**	**9:51**	-	-

	-	8:33	-	8:47	8:55	9:08	9:23	9:26	9:31	9:40	-	-
	-	11:33	-	11:47	**11:55**	**12:08**	**12:23**	**12:26**	**12:31**	**12:40**	-	**12:54**
	-	**1:33**	-	**1:47**	**1:55**	**2:08**	**2:23**	**2:26**	**2:31**	**2:40**	-	-
	-	**4:33**	-	**4:47**	**4:55**	**5:08**	**5:23**	**5:26**	**5:31**	**5:40**	-	**5:54**
	-	**7:33**	**7:41**	**7:57**	**8:07**	**8:17**	**8:31**	**8:35**	**8:40**	**8:49**	-	**9:03**
	-	9:33	-	9:47	9:55	10:08	10:23	10:26	10:31	10:40	-	10:54
	-	**1:33**	-	**1:47**	**1:55**	**2:08**	**2:23**	**2:26**	**2:31**	**2:40**	-	**2:54**
	-	**5:33**	**5:41**	**5:57**	**6:07**	**6:17**	**6:31**	**6:35**	**6:40**	**6:49**	-	**7:03**

Call 805-541-2228 or visit slorta.org for Cuesta College North extended evening service details.

MST Route 83 Fort Hunter Liggett service. See MST 83 schedule for details: slorta.org or 805-541-2228

All information is subject to change at any time. See slorta.org for current information.
Informaciones, incluyen las paradas del autobus, horarios,tarifas y tipos de pases, están sujetos a cambio.

Full list of RTA 10 stops. Schedule on other side.

10 SANTA MARIA to SAN LUIS OBISPO

Hacia al Sur Southbound

- **Cal Poly Library, Limited Service**
- Cal Poly Perfoming Arts Center (PAC), Limited Service
- **Government Center (Osos and Palm), *SLO Transit***
- Nipomo at Higuera
- S. Higuera at South
- **S. Higuera at Margarita (DMV & Social Services)**
- **S. Higuera at Suburban (Trader Joes & Food 4 Less)**
- **Premium Outlets, *South County Transit (SCT)***
- E. Grand at El Camino Real (ARCO am/pm)
- **El Camino Real at Halcyon (Halcyon Park and Ride)**
- N. Thompson at Hwy 101
- Nipomo High School
- Thompson at Branch
- **Tefft at Carillo**
- **S. Bradley at Jones (Hancock College)**
- Nicholson at E. Cypress (Amtrak Bus)
- E. Church at Palisade (Marian Medical Center)
- **Santa Maria Transit Center, *SMAT***

San Luis Obispo · Pismo Beach · Arroyo Grande · Nipomo · Santa Maria

Timed Stops

Northbound *Hacia al Norte*

- Cal Poly Perfoming Arts Center (PAC) Limited Service
- **Cal Poly Library, Limited Service**
- **Government Center (Osos and Palm), *SLO Transit***
- Marsh at Broad
- S. Higuera at South
- **S. Higuera at Margarita (DMV & Social Services)**
- **S.Higuera at Suburban (Trader Joes & Food 4 Less)**
- **Premium Outlets, *South County Transit (SCT)***
- **El Camino Real at Halcyon (Halcyon Park and Ride)**
- E. Grand Avenue at El Camino Real (ARCO AM/PM)
- N. Thompson at Hwy 101
- Nipomo High School
- Thompson at Branch
- **Tefft at Carillo Street**
- E. Church at Palisade (Marian Medical Center)
- **Nicholson at E. Cypress (Amtrak Bus)**
- **South Bradley at Jones (Hancock College)S**
- **Santa Maria Transit Center, *SMAT***

Timed Stops

CASH FARES *TARIFAS*	San Luis Obispo	Pismo Arroyo Grande	Nipomo	Santa Maria
San Luis Obispo	$1.50	$2.00	$2.50	$3.00
Pismo Arroyo Grande	$2.00	$1.50	$2.00	$2.50
Nipomo	$2.50	$2.00	$1.50	$2.00
Santa Maria	$3.00	$2.50	$2.00	$1.50

REGIONAL DAY PASS: $5.00

Please carry exact fare. No change is given.
Favor de traer la tarifa exacta.

More info / Más información
slorta.org

All information is subject to change at any time. See slorta.org for current information.
Informaciones, incluyen las paradas del autobus, horarios, tarifas y tipos de pases, están sujetos a cambio.

SAVE MONEY, BUY A PASS
Ahorre dinero, compra un pase

Regional Day Pass	$5.00
RTA 31-Day Pass	$44 Regular/$22 Discount
Regional 31-Day Pass	$64 Regular/$32 Discount
Stored Value Card	$15 Value
7-Day Pass	$14.00

See the Ride Guide for detailed pass & fare information.
Vea el guia de pasajero para detalles sobre pases y informacion sobre tarifas.

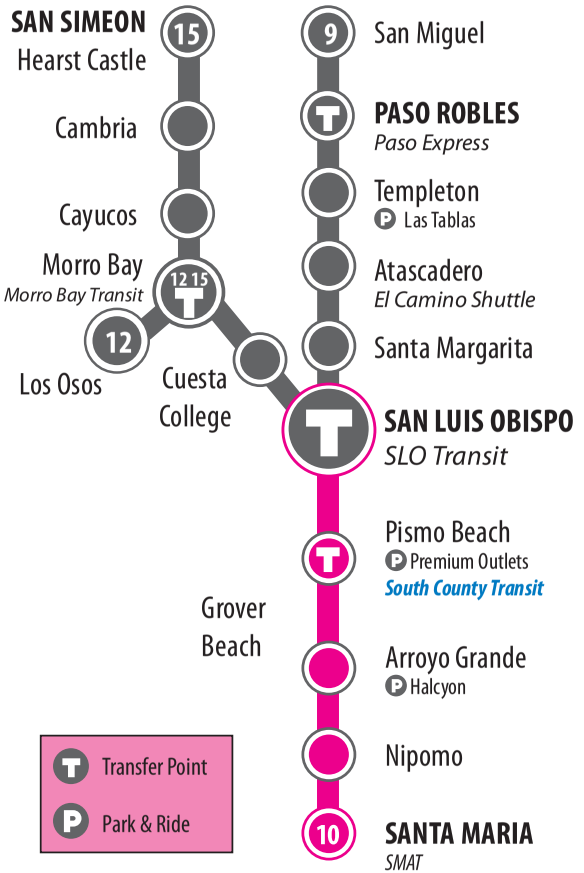
Discount Fares: half the regular cash fares for Seniors (65-79), Disabled and Medicare Card Holders, Students (K-12, RTA Only)
Precios descuentos: Mayores (65-79), Estudiantes (K-12), Discapacitados y personas con tarjeta de Medicare.

Children 44" and under ride free with paying adult
Niños debajo de 44 pulgadas viajan gratis al ser acompañados por un pasajero pagando la tarifa regular.

Purchase passes at all Rabobank branches in San Luis Obispo County. See the Ride Guide for more information and additional pass outlet locations.
Todos los Rabobanks venden los pases de RTA. Vea el guía de pasajero para más información y localizaciones adicionales con pases de venta.

Rabobank

rta REGIONAL TRANSIT AUTHORITY



Effective/*Comenzando* June 1, 2014

Information/*Información:*
541-2228 or slorta.org

Bold = PM

RTA Route 10 Timed Stops. Full list of RTA 10 stops on other side.

Bold = PM

NORTHBOUND *Hacia al Norte* - Santa Maria to San Luis Obispo

	SANTA MARIA		NIPOMO	ARROYO GRANDE	PISMO BEACH	SAN LUIS OBISPO		
	Santa Maria Transit Center	Hancock College	Tefft at Carrillo	El Camino Real at Halcyon	Pismo Beach Premium Outlets	S. Higuera at Suburban	Government Center Osos & Palm	Cal Poly Library
MONDAY – FRIDAY *LUNES A VIERNES*								
EXP	5:45	-	6:00	6:14	6:20	-	6:40	6:49
	6:14	6:18	6:35	6:49	7:00	7:12	7:28	-
EXP	6:15	-	6:30	6:44	6:50	-	7:15	7:24
EXP	-	-	-	7:21	7:28	-	7:48	-
	7:14	7:18	7:35	7:49	8:00	8:12	8:28	-
	8:14	8:18	8:35	8:49	9:00	9:12	9:28	-
	9:14	9:18	9:35	9:49	10:00	10:12	10:28	-
	10:14	10:18	10:35	10:49	11:00	11:12	11:28	-
	11:14	11:18	11:35	11:49	**12:00**	**12:12**	**12:28**	-
	12:14	**12:18**	**12:35**	**12:49**	**1:00**	**1:12**	**1:28**	-
	1:14	**1:18**	**1:35**	**1:49**	**2:00**	**2:12**	**2:28**	-
	2:14	**2:18**	**2:35**	**2:49**	**3:00**	**3:12**	**3:28**	-
	3:14	**3:18**	**3:35**	**3:49**	**4:00**	**4:12**	**4:28**	-
	4:14	**4:18**	**4:35**	**4:49**	**5:00**	**5:12**	**5:28**	-
	5:14	**5:18**	**5:35**	**5:49**	**6:00**	**6:12**	**6:28**	-
	6:14	**6:18**	**6:35**	**6:49**	**7:00**	**7:12**	**7:28**	-
	7:14	**7:18**	**7:35**	**7:49**	**8:00**	**8:12**	**8:28**	-
SATURDAY SABADO								
	7:14	7:18	7:35	7:49	8:00	8:12	8:28	-
	10:14	10:18	10:35	10:49	11:00	11:12	11:28	-
	12:14	**12:18**	**12:35**	**12:49**	**1:00**	**1:12**	**1:28**	
	3:14	**3:18**	**3:35**	**3:49**	**4:00**	**4:12**	**4:28**	-
	6:14	**6:18**	**6:35**	**6:49**	**7:00**	**7:12**	**7:28**	-
SUNDAY DOMINGO								
	8:14	8:18	8:35	8:49	9:00	9:12	9:28	-
	12:14	**12:18**	**12:35**	**12:49**	**1:00**	**1:12**	**1:28**	-
	4:14	**4:18**	**4:35**	**4:49**	**5:00**	**5:12**	**5:28**	-

SOUTHBOUND *Hacia al Sur* - San Luis Obispo to Santa Maria

	SAN LUIS OBISPO			PISMO BEACH	ARROYO GRANDE	NIPOMO	SANTA MARIA	
	Cal Poly Library	Government Center Osos & Palm	S. Higuera at Suburban	Pismo Beach Premium Outlets	El Camino Real at Halcyon	Tefft at Carrillo	Hancock College	Santa Maria Transit Center
	-	6:33	6:41	7:00	7:06	7:19	7:31	7:43
	-	7:33	7:41	8:00	8:06	8:19	8:31	8:43
	-	8:33	8:41	9:00	9:06	9:19	9:31	9:43
	-	9:33	9:41	10:00	10:06	10:19	10:31	10:43
	-	10:33	10:41	11:00	11:06	11:19	11:31	11:43
	-	11:33	11:41	**12:00**	**12:06**	**12:19**	**12:31**	**12:43**
	-	**12:33**	**12:41**	**1:00**	**1:06**	**1:19**	**1:31**	**1:43**
	-	**1:33**	**1:41**	**2:00**	**2:06**	**2:19**	**2:31**	**2:43**
	-	**2:33**	**2:41**	**3:00**	**3:06**	**3:19**	**3:31**	**3:43**
	-	**3:33**	**3:41**	**4:00**	**4:06**	**4:19**	**4:31**	**4:43**
EXP	**4:05**	**4:15**	-	**4:35**	**4:39**	-	-	-
	-	**4:33**	**4:41**	**5:00**	**5:06**	**5:19**	**5:31**	**5:43**
EXP	**5:15**	**5:25**	-	**5:41**	**5:49**	**6:05**	-	**6:20**
	-	**5:33**	**5:41**	**6:00**	**6:06**	**6:19**	**6:31**	**6:43**
	-	**6:33**	**6:41**	**7:00**	**7:06**	**7:19**	**7:31**	**7:43**
		7:33	**7:41**	**8:00**	**8:06**	**8:19**	**8:31**	**8:43**
	-	**8:33**	**8:41**	**9:00**	**9:06**	**9:19**	**9:31**	**9:43**
	-	8:33	8:41	9:00	9:06	9:19	9:31	9:43
	-	11:33	11:41	**12:00**	**12:06**	**12:19**	**12:31**	**12:43**
		1:33	**1:41**	**2:00**	**2:06**	**2:19**	**2:31**	**2:43**
	-	**4:33**	**4:41**	**5:00**	**5:06**	**5:19**	**5:31**	**5:43**
	-	**7:33**	**7:41**	**8:00**	**8:06**	**8:19**	**8:31**	**8:43**
	-	9:33	9:41	10:00	10:06	10:19	10:31	10:43
	-	**1:33**	**1:41**	**2:00**	**2:06**	**2:19**	**2:31**	**2:43**
	-	**5:33**	**5:41**	**6:00**	**6:06**	**6:19**	**6:31**	**6:43**

Express service/*Servico expreso* **Bold times indicate PM** /*Tiempos oscuros indican PM* **No service on Holidays: New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.**

REGIONAL TRANSIT AUTHORITY

Effective June 1, 2014

Holidays / *Dias festivos*

No Service / *No Servicio:*

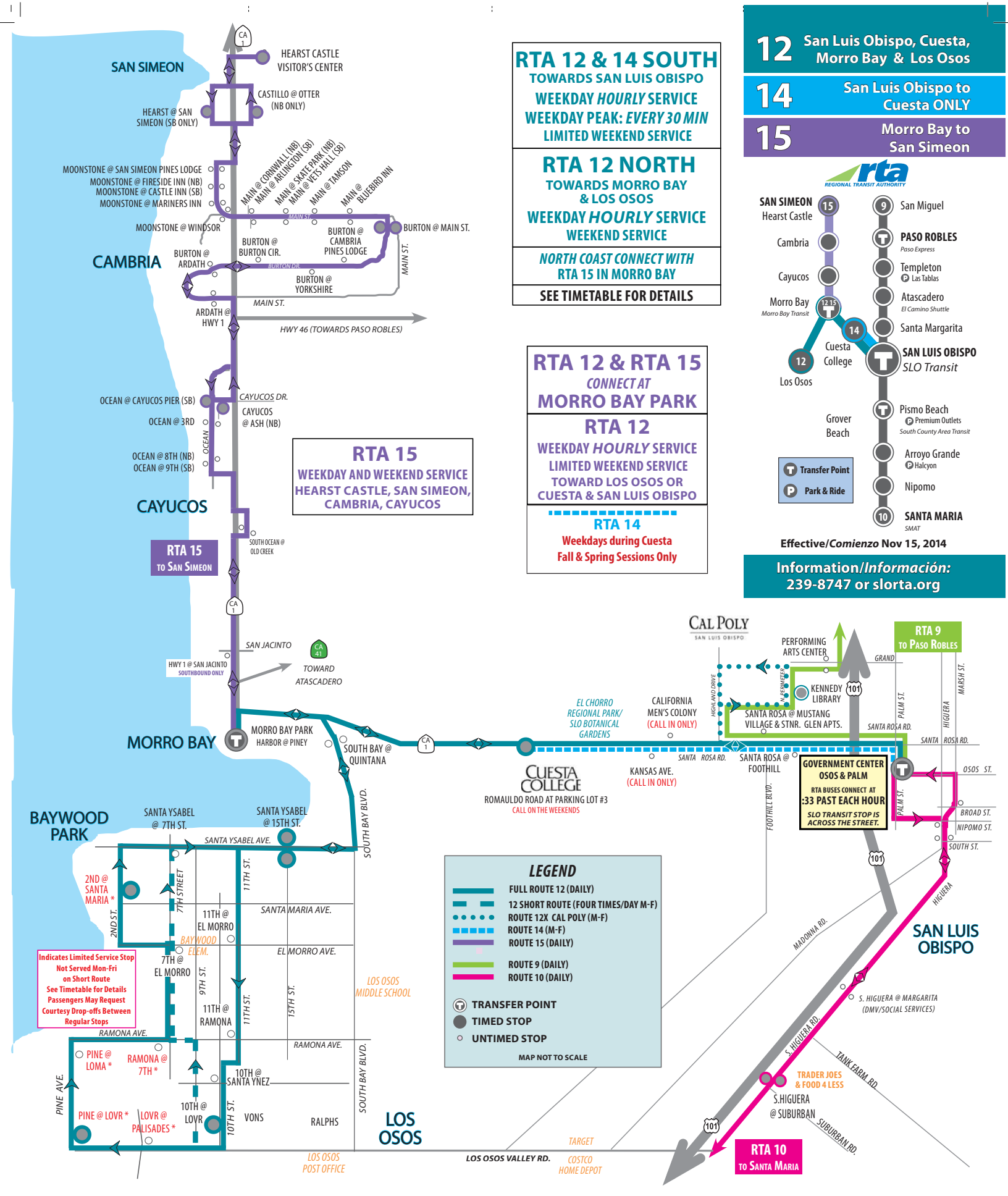
Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day, and New Year's Day

Reduced Schedule (Sunday Service) / *Servicio reducio (Horario de Domingo):*

Christmas Eve, New Year's Eve, the day after (*dia despues de*) Thanksgiving, the day after (*dia despues de*) Christmas (Dec. 26th), the day after (*dia despues de*) New Year's Day (Jan. 2nd)

More info / Más información
slorta.org

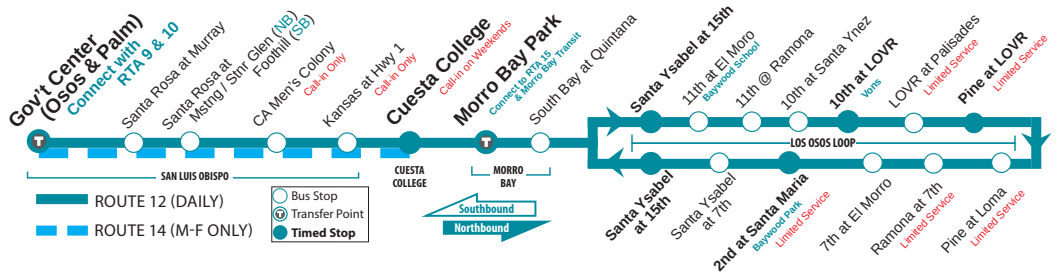
All information is subject to change without notice. See slorta.org for up-to-date information.


12 San Luis Obispo, Cuesta, Morro Bay & Los Osos
14 San Luis Obispo to Cuesta ONLY
15 Morro Bay to San Simeon
RTA 12 & 14 SOUTH
TOWARDS SAN LUIS OBISPO
WEEKDAY HOURLY SERVICE
WEEKDAY PEAK: EVERY 30 MIN
LIMITED WEEKEND SERVICE
RTA 12 NORTH
TOWARDS MORRO BAY & LOS OSOS
WEEKDAY HOURLY SERVICE
WEEKEND SERVICE
NORTH COAST CONNECT WITH RTA 15 IN MORRO BAY
SEE TIMETABLE FOR DETAILS
RTA 12 & RTA 15
CONNECT AT
MORRO BAY PARK
RTA 12
WEEKDAY HOURLY SERVICE
LIMITED WEEKEND SERVICE
TOWARD LOS OSOS OR CUESTA & SAN LUIS OBISPO
RTA 14
Weekdays during Cuesta
Fall & Spring Sessions Only
RTA 15
WEEKDAY AND WEEKEND SERVICE
HEARST CASTLE, SAN SIMEON, CAMBRIA, CAYUCOS
SAN SIMEON
HEARST CASTLE VISITOR'S CENTER
CASTILLO @ OTTER (NB ONLY)
HEARST @ SAN SIMEON (SB ONLY)
MOONSTONE @ SAN SIMEON PINES LODGE
MOONSTONE @ FIRESIDE INN (NB)
MOONSTONE @ CASTLE INN (SB)
MOONSTONE @ MARINERS INN
MAIN @ CORNWALL (NB)
MAIN @ ARLINGTON (SB)
MAIN @ SKATE PARK (NB)
MAIN @ VETS HALL (SB)
MAIN @ TAMSON
MAIN @ BLUEBIRD INN
MAIN ST.
MOONSTONE @ WINDSOR
BURTON @ MAIN ST.
CAMBRIA
BURTON @ ARDATH
BURTON @ BURTON CIR.
BURTON @ CAMBRIA PINES LODGE
BURTON DR.
BURTON @ YORKSHIRE
ARDATH @ HWY 1
HWY 46 (TOWARDS PASO ROBLES)
OCEAN @ CAYUCOS PIER (SB)
CAYUCOS DR.
OCEAN @ 3RD
CAYUCOS @ ASH (NB)
OCEAN @ 8TH (NB)
OCEAN @ 9TH (SB)
CAYUCOS
SOUTH OCEAN @ OLD CREEK
RTA 15 TO SAN SIMEON
SAN JACINTO
HWY 1 @ SAN JACINTO SOUTHBOUND ONLY
TOWARD ATASCADERO
MORRO BAY
MORRO BAY PARK HARBOR @ PINEY
SOUTH BAY @ QUINTANA
EL CHORRO REGIONAL PARK/ SLO BOTANICAL GARDENS
CALIFORNIA MEN'S COLONY (CALL IN ONLY)
CAL POLY SAN LUIS OBISPO
PERFORMING ARTS CENTER
KENNEDY LIBRARY
SANTA ROSA @ MUSTANG VILLAGE & STNR. GLEN APTS.
SANTA ROSA @ FOOTHILL
KANSAS AVE. (CALL IN ONLY)
CUESTA COLLEGE
ROMAULDO ROAD AT PARKING LOT #3
CALL ON THE WEEKENDS
GOVERNMENT CENTER OSOS & PALM
RTA BUSES CONNECT AT :33 PAST EACH HOUR
SLO TRANSIT STOP IS ACROSS THE STREET.
RTA 9 TO PASO ROBLES
GRAND
MARSH ST.
PALM ST.
HIGUERA
SANTA ROSA RD.
OSOS ST.
BROAD ST.
NIPOMO ST.
SOUTH ST.
FOOTHILL BLVD.
HIGHLAND DRIVE
N. PERIMETER
BAYWOOD PARK
SANTA YSABEL @ 7TH ST.
SANTA YSABEL @ 15TH ST.
SANTA YSABEL AVE.
SOUTH BAY BLVD.
2ND @ SANTA MARIA *
2ND ST.
7TH STREET
11TH ST.
11TH @ EL MORRO
SANTA MARIA AVE.
BAYWOOD ELEM.
EL MORRO AVE.
7TH @ EL MORRO
9TH ST.
11TH @ RAMONA
15TH ST.
LOS OSOS MIDDLE SCHOOL
RAMONA AVE.
PINE @ LOMA *
RAMONA @ 7TH *
PINE AVE.
10TH @ SANTA YNEZ
10TH @ LOVR
10TH ST.
PINE @ LOVR *
LOVR @ PALISADES *
VONS
RALPHS
LOS OSOS
LOS OSOS POST OFFICE
LOS OSOS VALLEY RD.
TARGET
COSTCO HOME DEPOT
Indicates Limited Service Stop Not Served Mon-Fri on Short Route See Timetable for Details Passengers May Request Courtesy Drop-offs Between Regular Stops
LEGEND
FULL ROUTE 12 (DAILY)
12 SHORT ROUTE (FOUR TIMES/DAY M-F)
ROUTE 12X CAL POLY (M-F)
ROUTE 14 (M-F)
ROUTE 15 (DAILY)
ROUTE 9 (DAILY)
ROUTE 10 (DAILY)
TRANSFER POINT
TIMED STOP
UNTIMED STOP
MAP NOT TO SCALE
MADONNA RD.
SAN LUIS OBISPO
S. HIGUERA @ MARGARITA (DMV/SOCIAL SERVICES)
S. HIGUERA RD.
TANK FARM RD.
TRADER JOES & FOOD 4 LESS
S.HIGUERA @ SUBURBAN
SUBURBAN RD.
RTA 10 TO SANTA MARIA
rta REGIONAL TRANSIT AUTHORITY
SAN SIMEON Hearst Castle
Cambria
Cayucos
Morro Bay Morro Bay Transit
Los Osos
Cuesta College
Grover Beach
San Miguel
PASO ROBLES Paso Express
Templeton Las Tablas
Atascadero El Camino Shuttle
Santa Margarita
SAN LUIS OBISPO SLO Transit
Pismo Beach Premium Outlets South County Area Transit
Arroyo Grande Halcyon
Nipomo
SANTA MARIA SMAT
Transfer Point
Park & Ride
Effective/Comienzo Nov 15, 2014
Information/Información: 239-8747 or slorta.org

Route 12 Timed Stops: San Luis Obispo, Cuesta College, Los Osos, Morro Bay

BOLD = PM

	ROUTE	Northbound				Los Osos Loop					Southbound			
		San Luis Obispo		Morro Bay		Connect TO RTA 15				Connect FROM RTA 15	Morro Bay		San Luis Obispo	
		Gov't Center	Cuesta College	Morro Bay Park Arrive	Morro Bay Park Depart	Santa Ysabel at 15th	10th at LOVR	Pine at LOVR	2nd at Santa Maria	Santa Ysabel at 15th	Morro Bay Park Arrive	Morro Bay Park Depart	Cuesta College	Gov't Center
Monday - Friday *Lunes A Viernes*		-	-	-	-	6:23	6:29	6:32	6:40	6:43	6:55	7:00	7:11	7:25
	12x	*** 12x arrives at Cal Poly at 7:30 am ***				6:48	6:54	6:57	7:05	7:08	7:18	7:18	***	7:39
		6:33	6:46	6:55	7:15	7:23	7:29	7:32	7:40	7:43	7:55	8:00	8:11	8:25
		7:33	7:46	7:55	8:15	8:23	8:29	8:32	8:40	8:43	8:55	9:00	9:11	9:25
		8:33	8:46	8:55	9:15	9:23	9:29	9:32	9:40	9:43	9:55	10:00	10:11	10:25
	12s	9:33	9:46	9:55	10:25	10:33	10:39	→	→	10:46	10:55	11:00	11:11	11:25
	12s	10:33	10:46	10:55	11:25	11:33	11:39	→	→	11:46	11:55	**12:00**	**12:11**	**12:25**
		11:33	11:46	11:55	**12:00**	**12:08**	**12:14**	**12:17**	**12:25**	**12:28**	**12:38**	**1:00**	**1:11**	**1:25**
		12:33	**12:46**	**12:55**	**1:00**	**1:08**	**1:14**	**1:17**	**1:25**	**1:28**	**1:38**	**2:00**	**2:11**	**2:25**
		1:33	**1:46**	**1:55**	**2:00**	**2:08**	**2:14**	**2:17**	**2:25**	**2:28**	**2:38**	**3:00**	**3:11**	**3:25**
		2:33	**2:46**	**2:55**	**3:00**	**3:08**	**3:14**	**3:17**	**3:25**	**3:28**	**3:38**	**4:00**	**4:11**	**4:25**
		3:33	**3:46**	**3:55**	**4:00**	**4:08**	**4:14**	**4:17**	**4:25**	**4:28**	**4:38**	**5:00**	**5:11**	**5:25**
		4:33	**4:46**	**4:55**	**5:00**	**5:08**	**5:14**	**5:17**	**5:25**	**5:28**	**5:38**	**6:00**	**6:11**	**6:25**
	12x	**5:10**	***	**5:38**	**5:38**	**5:46**	**5:52**	**5:55**	**6:03**	**6:06** *end*	*** 12x departs Cal Poly at 5:20 pm ***			
	12s	**5:33**	**5:46**	**5:55**	**6:00**	**6:08**	**6:14**	→	→	**6:21**	**6:30**	**7:00**	**7:11**	**7:25**
	12s	**6:33**	**6:46**	**6:55**	**7:00**	**7:08**	**7:14**	→	→	**7:21**	**7:30**	**8:00**	**8:11**	**8:25**
		7:33	**7:46**	**7:55**	**8:00**	**8:08**	**8:14**	**8:17**	**8:25**	**8:28**	**8:38**	**8:38**	**8:49**	**9:03**
		8:33	**8:46**	**8:55**	**9:00**	**9:08**	**9:14**	**9:17**	**9:25**	**9:28**	**9:38**	**9:38**	**9:49**	**10:03**
Saturday *Sabado*		-	-	-	-	7:23	7:29	7:32	7:40	7:43	7:53	8:00	CALL	8:25
		8:33	CALL	8:55	9:00	9:08	9:14	9:17	9:25	9:28	-	-	-	-
		-	-	-	-	10:23	10:29	10:32	10:40	10:43	10:53	11:00	CALL	11:25
		11:33	CALL	11:55	**12:00**	**12:08**	**12:14**	**12:17**	**12:25**	**12:28**	-	-	-	-
		-	-	-	-	**12:23**	**12:29**	**12:32**	**12:40**	**12:43**	**12:53**	**1:00**	**CALL**	**1:25**
		1:33	**CALL**	**1:55**	**2:00**	**2:08**	**2:14**	**2:17**	**2:25**	**2:28**	-	-	-	-
		-	-	-	-	**3:23**	**3:29**	**3:32**	**3:40**	**3:43**	**3:53**	**4:00**	**CALL**	**4:25**
		4:33	**CALL**	**4:55**	**5:00**	**5:08**	**5:14**	**5:17**	**5:25**	**5:28**	-	-	-	-
		-	-	-	-	**6:23**	**6:29**	**6:32**	**6:40**	**6:43**	**6:53**	**7:00**	**CALL**	**7:25**
		7:33	**CALL**	**7:55**	**8:00**	**8:08**	**8:14**	**8:17**	**8:25**	**8:28**	-	-	-	-
Sunday *Domingo*		-	-	-	-	8:23	8:29	8:32	8:40	8:43	8:53	9:00	CALL	9:25
		9:33	CALL	9:55	10:00	10:08	10:14	10:17	10:25	10:28	10:38	10:38	CALL	11:00
		11:33	CALL	11:55	**12:00**	**12:08**	**12:14**	-	-	-	-	-	-	-
		-	-	-	-	**12:23**	**12:29**	**12:32**	**12:40**	**12:43**	**12:53**	**1:00**	**CALL**	**1:25**
		1:33	**CALL**	**1:55**	**2:00**	**2:08**	**2:14**	**2:17**	**2:25**	**2:28**	**2:38**	**2:38**	**CALL**	**3:00**
		3:33	**CALL**	**3:55**	**4:00**	**4:08**	**4:14**	-	-	-	-	-	-	-
		-	-	-	-	**4:23**	**4:29**	**4:32**	**4:40**	**4:43**	**5:00**	**5:00**	**CALL**	**5:25**
		5:33	**CALL**	**5:55**	**6:00**	**6:08**	**6:14**	**6:17**	**6:25**	**6:28**	-	-	-	-



BOLD = PM

ROUTE 15 SOUTHBOUND
TIMED STOPS: HEARST CASTLE TOWARDS MORRO BAY

	SAN SIMEON		CAMBRIA	CAYUCOS	MORRO BAY
	Hearst Castle Visitors Center	Hearst Dr. @ San Simeon	Burton @ Main St.	Ocean @ Cayucos	Morro Bay Park - *Arrive*
Mon- Fri *Lunes A Viernes*	----	6:05	6:17	6:40	6:55
	8:00	8:05	8:17	8:40	8:55
	11:00	11:05	11:17	11:40	11:55
	2:00	**2:05**	**2:17**	**2:40**	**2:55**
	5:00	**5:05**	**5:17**	**5:40**	**5:55**
Saturday *Sabado*	-	7:05	7:17	7:40	7:55
	10:00	10:05	10:17	10:40	10:55
	12:00	**12:05**	**12:17**	**12:40**	**12:55**
	3:00	**3:05**	**3:17**	**3:40**	**3:55**
	6:00*	**6:05**	**6:17**	**6:40**	**6:55**
Sunday *Domingo*	-	8:05	8:17	8:40	8:55
	12:00	**12:05**	**12:17**	**12:40**	**12:55**
	4:00	**4:05**	**4:17**	**4:40**	**4:55**

12 & 15 Connect at Morro Bay Park

ROUTE 15 NORTHBOUND
TIMED STOPS: MORRO BAY TOWARDS HEARST CASTLE

	MORRO BAY	CAYUCOS	CAMBRIA	SAN SIMEON	
	Morro Bay Park - *Depart*	Cayucos Dr. @ Ash	Burton @ Main St.	Castillo @ Otter Way	Hearst Castle Visitors Center
Mon- Fri *Lunes A Viernes*	7:02	7:14	7:34	7:47	7:54
	10:02	10:14	10:34	10:47	10:54
	12:02	**12:14**	**12:34**	**12:47**	**12:54**
	3:02	**3:14**	**3:34**	**3:47**	**3:54**
	6:02	**6:14**	**6:34**	**6:47**	----
Saturday *Sabado*	9:02	9:14	9:34	9:47	9:54
	12:02	**12:14**	**12:34**	**12:47**	**12:54**
	2:02	**2:14**	**2:34**	**2:47**	**2:54**
	5:02	**5:14**	**5:34**	**5:47**	**5:54***
	8:02	**8:14**	**8:34**	**8:47**	
Sunday *Domingo*	10:02	10:14	10:34	10:47	10:54
	2:02	**2:14**	**2:34**	**2:47**	**2:54**
	6:02	**6:14**	**6:34**	**6:47**	----

* Peak Summer season only: when Castle gates are open

Route 14 Timed Stops

Weekdays during Cuesta Fall & Spring Sessions Only

To Cuesta		From Cuesta	
Gov't Center	Cuesta College	Cuesta College	Gov't Center
7:42	7:57	-	-
8:03	8:16	8:48	9:00
9:03	9:16	9:48	10:00
10:03	10:16	10:48	11:00
1:03	**1:16**	**1:48**	**2:00**
2:03	**2:16**	**2:48**	**3:00**
3:03	**3:16**	**3:30**	**3:45**

Holidays / *Dias festivos*

No Service / *No Servicio:*
Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day, and New Year's Day

Reduced Schedule (Sunday Service)
Servicio reducio (Horario de Domingo):
Christmas Eve, New Year's Eve, the day after (*dia despues de*) Thanksgiving, the day after (*dia despues de*) Christmas (Dec. 26th), the day after (*dia despues de*) New Year's Day (Jan. 2nd)

805.541.2228
slorta.org

CASH FARES *TARIFAS*	San Luis Obispo	Cuesta Kansas CMC	Morro Bay Los Osos	Cayucos Cambria San Simeon
San Luis Obispo	$1.50	$2.00	$2.50	$3.00
Cuesta College Kansas / CMC	$2.00	$1.50	$1.50	$2.00
Morro Bay Los Osos	$2.50	$1.50	$1.50	$1.50
Cayucos, Cambria San Simeon	$3.00	$2.00	$1.50	$1.50

Regional Day Pass: $5.00

SAVE MONEY, BUY A PASS
Ahorre dinero, compra un pase

Regional Day Pass	$5.00
RTA 31-Day Pass	$44 Regular/$22 Discount
Regional 31-Day Pass	$64 Regular/$32 Discount
Stored Value Card	$15 Value
7-Day Pass	$14.00

See the Ride Guide for detailed pass & fare information.
Vea el guia de pasajero para detalles sobre pases y informacion sobre tarifas.

Discount Fares: half the regular cash fares for Seniors (65-79), Disabled and Medicare Card Holders, Students (K-12, RTA Only)
Precios descuentos: Mayores (65-79), Estudiantes (K-12), Discapacitados y personas con tarjeta de Medicare.

Children 44" and under ride free with paying adult
Niños debajo de 44 pulgadas viajan gratis al ser acompañados por un pasajero pagando la tarifa regular.

Purchase passes at all Rabobank branches in San Luis Obispo County. See the Ride Guide for more information and additional pass outlet locations.
Todos los Rabobanks venden los pases de RTA. Vea el guia de pasajero para más información y localizaciones adicionales con pases de venta.
Rabobank

Please carry exact fare. No change is given.
Favor de traer la tarifa exacta.

More info / Más información
slorta.org

APPENDIX D: Timetables used to Populate Google with RTA Route and Schedule Information

			Start	End	SPAN OF SERVICE		# of Bus Trips per Day
	RTA 9	Atascadero Transit Center	5:48	21:19	15:31	0.516667	34
		Cuesta College North	8:00	19:00	11:00		23
		Las Tablas Park & Ride	5:38	21:37	15:59	0.983333	34
		Twin Cities Hospital	6:16	21:34	15:18	0.3	29
					0:00		
	RTA 10	Pismo Beach Premiun Outlets	6:20	21:00	14:40	0.666667	33
		El Camino Real at Halcyon	6:15	21:06	14:51	0.85	33
		E. Grand at El Camino Real	6:14	21:05	14:51	0.85	32
		S. Bradley at Jones	6:18	21:31	15:13	0.216667	28
		Nicholson at E. Cypress	6:24	21:38	15:14	0.233333	29
		E. Church at Palisade	6:24	21:38	15:14	0.233333	29
		Santa Maria Transit Center	5:45	21:43	15:58	0.966667	31
	RTA 12/14	Cuesta College	6:46	21:49	15:03	0.05	44
	RTA 15	HEARST CASTLE VISITOR'S CENTER	7:54	17:00	9:06	0.1	8
	Paso Express	Spring at 24th NB	7:49	18:50	11:01	0.016667	24
		Spring at 28th NB	7:51	18:52	11:01	0.016667	24
		Spring at 30th NB	7:53	18:54	11:01	0.016667	24
		Oak at 34th	7:55	18:56	11:01	0.016667	24
		Spring at 34th SB	6:48	17:58	11:10	0.166667	24
		Spring at 32nd SB	6:48	17:58	11:10	0.166667	24
		Spring at 30th SB	6:49	17:59	11:10	0.166667	24
		Spring at 28th SB	6:49	18:00	11:11	0.183333	24
		Spring at 26th SB	6:50	18:01	11:11	0.183333	24
		Riverside at Ysabel	7:03	18:47	11:44	0.733333	24
		Ysabel	7:03	18:47	11:44	0.733333	24
RTA 9, 10, 12/14	Northbound, Southbound	Government Center (Osos & Palm)	6:22	22:03	15:41	0.683333	116
RTA 9; PE A&B	Northbound, Southbound, CW & CCW Loops	Paso Robles Transit Center (8th & Pine)	5:30	21:51	16:21	0.35	68
RTA 12, 15	Northbound, Southbound, Clockwise loop	MORRO BAY PARK	6:55	21:38	14:43	0.716667	43
RTA 9, 10, 12	Northbound	Cal Poly Kennedy Library	6:49	20:41	13:52	0.866667	12
RTA 9, 10	Northbound	Cal Poly Performing Arts Cntr.	6:50	20:42	13:52	0.866667	12
RTA 9, 10, 12/14	Northbound	Santa Rosa at Stenner Glen Apts (NB)	6:37	20:38	14:01	0.016667	27
RTA 9, 12/14	Southbound	Santa Rosa at Foothill	6:14	21:59	15:45	0.916667	27
RTA 9, 10, 12	Northbound	Santa Rosa at Murray	6:36	20:37	14:01	0.016667	27
RTA 9, PE A	Northbound, CW Loop	Spring at 2nd	7:32	21:48	14:16	0.266667	27
RTA 9; PE A	Northbound, CW Loop	Spring at 5th	7:33	21:49	14:16	0.266667	27
RTA 9, PE B	Southbound, CCW Loop	Spring at 4th	6:03	19:12	13:09	0.15	26

STOP_NAME	TIMES																					SPAN OF SERVICE		# of Bus Trips per Day
Kennedy Library SB											14:21	15:21		16:21		17:21	18:21							5
San Luis Obispo (SLO) Government Center at Osos and Palm													16:15		17:15				20:33					3
Santa Rosa at Murray (NB)													16:16		17:16				20:34					3
Santa Rosa Avenue at Foothill (Stenner Glen Apts)													16:19		17:19				20:37					3
Kennedy Library NB													16:24		17:24				20:41					3
Performing Arts Center NB													16:25		17:25				20:42					3
Grand at McCollum (S)													16:25		17:25				20:42		4:17	0.283333333		3
Grand at Wilson													16:26		17:26				20:43		4:17	0.283333333		3
San Luis Obispo (SLO) Government Center at Osos and Pal	6:33	7:33	8:33	9:33	10:33		11:33	12:33	13:33	14:33	15:33		16:33		17:33	18:33	19:33							14
El Camino Real at Maria Avenue NB	6:46	7:46	8:46	9:46	10:46		11:46	12:46	13:46	14:46	15:46		16:46		17:46	18:46	19:46	20:57			14:11	0.183333333		15
El Camino Real at Encina Avenue NB	6:47	7:47	8:47	9:47	10:47		11:47	12:47	13:47	14:47	15:47		16:47		17:47	18:47	19:47	20:58			14:11	0.183333333		15
El Camino Real at Garden Farms NB	6:50	7:50	8:50	9:50	10:50		11:50	12:50	13:50	14:50	15:50		16:50		17:50	18:50	19:50	21:02			14:12	0.2		15
El Camino Real at Santa Margarita Road NB	6:51	7:51	8:51	9:51	10:51		11:51	12:51	13:51	14:51	15:51		16:51		17:51	18:51	19:51	21:03			14:12	0.2		15
El Camino Real at Carmel Road NB	6:52	7:52	8:52	9:52	10:52		11:52	12:52	13:52	14:52	15:52		16:52		17:52	18:52	19:52	21:05			14:13	0.216666667		15
Viejo Camino at El Camino Real NB	6:53	7:53	8:53	9:53	10:53		11:53	12:53	13:53	14:53	15:53		16:53		17:53	18:53	19:53	21:07			14:14	0.233333333		15
Viejo Camino at Santa Barbara Road NB	6:54	7:54	8:54	9:54	10:54		11:54	12:54	13:54	14:54	15:54		16:54		17:54	18:54	19:54	21:09			14:15	0.25		15
Viejo Camino at Bocina Lane NB	6:55	7:55	8:55	9:55	10:55		11:55	12:55	13:55	14:55	15:55		16:55		17:55	18:55	19:55	21:09			14:14	0.233333333		15
El Camino Real at Avenida Maria	7:00	8:00	9:00	10:00	11:00		12:00	13:00	14:00	15:00	16:00		17:00		18:00	19:00	20:00	21:10			14:10	0.166666667		15
El Camino Real at Musselman Drive NB	7:01	8:01	9:01	10:01	11:01		12:01	13:01	14:01	15:01	16:01		17:01		18:01	19:01	20:01	21:11			14:10	0.166666667		15
El Camino Real at El Bordo Avenue NB (Post Office)	7:02	8:02	9:02	10:02	11:02		12:02	13:02	14:02	15:02	16:02		17:02		18:02	19:02	20:02	21:12			14:10	0.166666667		15
El Camino Real at Principal Avenue NB	7:03	8:03	9:03	10:03	11:03		12:03	13:03	14:03	15:03	16:03		17:03		18:03	19:03	20:03	21:13			14:10	0.166666667		15
El Camino Real at Solano Avenue NB	7:04	8:04	9:04	10:04	11:04		12:04	13:04	14:04	15:04	16:04		17:04		18:04	19:04	20:04	21:14			14:10	0.166666667		15
El Camino Real/Palomar Avenue NB	7:04	8:04	9:04	10:04	11:04		12:04	13:04	14:04	15:04	16:04		17:04		18:04	19:04	20:04	21:14			14:10	0.166666667		15
El Camino Real at Pueblo Avenue NB	7:05	8:05	9:05	10:05	11:05		12:05	13:05	14:05	15:05	16:05		17:05		18:05	19:05	20:05	21:15			14:10	0.166666667		15
El Camino Real across from Von's NB	7:06	8:06	9:06	10:06	11:06		12:06	13:06	14:06	15:06	16:06		17:06		18:06	19:06	20:06	21:16			14:10	0.166666667		15
Atascadero Transit Center	7:07	8:07	9:07	10:07	11:07		12:07	13:07	14:07	15:07	16:07	16:49	17:07	17:49	18:07	19:07	20:07	21:18			14:11	0.183333333		17
El Camino Real at Traffic Way NB	7:08	8:08	9:08	10:08	11:08		12:08	13:08	14:08	15:08	16:08		17:08		18:08	19:08	20:08	21:19			14:11	0.183333333		15
El Camino Real at Rosario NB	7:09	8:09	9:09	10:09	11:09		12:09	13:09	14:09	15:09	16:09		17:09		18:09	19:09	20:09	21:20			14:11	0.183333333		15
El Camino Real at Twin Oaks Apartments	7:10	8:10	9:10	10:10	11:10		12:10	13:10	14:10	15:10	16:10		17:10		18:10	19:10	20:10	21:21			14:11	0.183333333		15
El Camino Real at San Jacinto NB	7:11	8:11	9:11	10:11	11:11		12:11	13:11	14:11	15:11	16:11		17:11		18:11	19:11	20:11	21:22			14:11	0.183333333		15
El Camino Real at San Anselmo NB	7:12	8:12	9:12	10:12	11:12		12:12	13:12	14:12	15:12	16:12		17:12		18:12	19:12	20:12	21:23			14:11	0.183333333		15
El Camino Real at San Benito NB	7:13	8:13	9:13	10:13	11:13		12:13	13:13	14:13	15:13	16:13		17:13		18:13	19:13	20:13	21:24			14:11	0.183333333		15
El Camino Real/Del Rio NB	7:14	8:14	9:14	10:14	11:14		12:14	13:14	14:14	15:14	16:14		17:14		18:14	19:14	20:14	21:25			14:11	0.183333333		15
ECR (El Camino Real) at Atalaya	7:15	8:15	9:15	10:15	11:15		12:15	13:15	14:15	15:15	16:15		17:15		18:15	19:15	20:15	21:26			14:11	0.183333333		15
Twin Cities Hospital	7:22	8:22	9:22	10:22	11:22		12:22	13:22	14:22	15:22	16:22		17:22		18:22	19:22	20:22	21:33			14:11	0.183333333		15
Las Tablas Park and Ride	7:26	8:26	9:26	10:26	11:26		12:26	13:26	14:26	15:26	16:26	16:57	17:26	17:57	18:26	19:26	20:26	21:37			14:11	0.183333333		17
Theatre Drive at River Lodge Motel - (northbound)	7:31	8:31	9:31	10:31	11:31		12:31	13:31	14:31	15:31	16:31		17:31		18:31	19:31	20:31	21:42			14:11	0.183333333		15
Gateway Center 1st and Oak (eastbound)	7:36	8:36	9:36	10:36	11:36		12:36	13:36	14:36	15:36	16:36		17:36		18:36	19:36	20:36	21:46			14:10	0.183333333		15
Spring & 2nd	7:37	8:37	9:37	10:37	11:37		12:37	13:37	14:37	15:37	16:37		17:37		18:37	19:37	20:37	21:48			14:11	0.183333333		15
Spring & 5th (Wells Fargo Plaza)	7:38	8:38	9:38	10:38	11:38		12:38	13:38	14:38	15:38	16:38		17:38		18:38	19:38	20:38	21:49			14:11	0.183333333		15
North County Transportation Center	7:40	8:40	9:40	10:40	11:40	11:40	12:40	13:40	14:40	15:40	16:40	17:07	17:40	18:07	18:40	19:40	20:40	21:51			14:11	0.183333333		18
Cuesta College	7:50	8:50	9:50	10:50	11:50		12:50	13:50	14:50		16:50		17:50		18:50						11:00			11
Mission at 14th St.						11:54								18:21							6:27	0.45		2

STOP_NAME	TIMES																				SPAN OF SERVICE		# of Bus Trips per Day
Mission at 14th St.			6:21							11:56											5:35	0.583333333	2
Cuesta College						8:00	9:00	10:00	11:00		12:00	13:00	14:00	15:00	16:00		17:00	18:00	19:00				12
North County Transportation Center	5:30	6:01	6:35	6:50	7:01	8:10	9:10	10:10	11:10	12:10	12:10	13:10	14:10	15:10	16:10	16:20	17:10	18:10	19:10				19
Spring & 4th (Farmhouse Motel)		6:03			7:03	8:12	9:12	10:12	11:12	12:12		13:12	14:12	15:12	16:12		17:12	18:12	19:12				14
1st and Oak (westbound)		6:04			7:04	8:13	9:13	10:13	11:13	12:13		13:13	14:13	15:13	16:13		17:13	18:13	19:13	13:09	0.15		14
Theatre Drive (Chili's Restaurant)		6:07			7:07	8:15	9:15	10:15	11:15	12:15		13:15	14:15	15:15	16:15		17:15	18:15	19:15	13:08	0.133333333		14
Target Shopping Center		6:10			7:10	8:19	9:19	10:19	11:19	12:19		13:19	14:19	15:19	16:19		17:19	18:19	19:19	13:09	0.15		14
Theatre Drive at Rancho Paso Rd		6:11			7:11	8:20	9:20	10:20	11:20	12:20		13:20	14:20	15:20	16:20		17:20	18:20	19:20	13:09	0.15		14
Twin Cities Hospital		6:16			7:16	8:25	9:25	10:25	11:25	12:25		13:25	14:25	15:25	16:25		17:25	18:25	19:25				14
Las Tablas Park and Ride	5:38	6:18	6:43	6:58	7:18	8:27	9:27	10:27	11:27	12:27		13:27	14:27	15:27	16:27		17:27	18:27	19:27				17
El Camino Real/Del Rio SB		6:24			7:24	8:33	9:33	10:33	11:33	12:33		13:33	14:33	15:33	16:33		17:33	18:33	19:33	13:09	0.15		14
El Camino Real at San Benito SB		6:26			7:26	8:35	9:34	10:34	11:34	12:34		13:34	14:34	15:34	16:34		17:34	18:34	19:34	13:08	0.133333333		14
El Camino Real at San Anselmo SB		6:26			7:26	8:36	9:35	10:35	11:35	12:35		13:35	14:35	15:35	16:35		17:35	18:35	19:35	13:09	0.15		14
El Camino Real at Rosario SB		6:29			7:29	8:39	9:38	10:38	11:38	12:38		13:38	14:38	15:38	16:38		17:38	18:38	19:38	13:09	0.15		14
El Camino Real at West Mall SB		6:30			7:30	8:40	9:39	10:39	11:39	12:39		13:39	14:39	15:39	16:39		17:39	18:39	19:39	13:09	0.15		14
Atascadero Transit Center	5:48	6:33	6:51	7:08	7:33	8:42	9:42	10:42	11:42	12:42		13:42	14:42	15:42	16:42		17:42	18:42	19:42				17
Vons Atascadero / Car Wash		6:35			7:35	8:44	9:44	10:44	11:44	12:44		13:44	14:44	15:44	16:44		17:44	18:44	19:44	13:09	0.15		14
El Camino Real at Pueblo Avenue SB		6:36			7:36	8:45	9:45	10:45	11:45	12:45		13:45	14:45	15:45	16:45		17:45	18:45	19:45	13:09	0.15		14
El Camino Real at El Camino Real Plaza Shopping Cer		6:37			7:37	8:46	9:46	10:46	11:46	12:46		13:46	14:46	15:46	16:46		17:46	18:46	19:46	13:09	0.15		14
El Camino Real at Plata Lane SB		6:38			7:37	8:47	9:46	10:46	11:46	12:46		13:46	14:46	15:46	16:46		17:46	18:46	19:46	13:08	0.15		14
El Camino Real at El Bordo Avenue SB (Post Office)		6:39			7:39	8:48	9:48	10:48	11:48	12:48		13:48	14:48	15:48	16:48		17:48	18:48	19:48	13:09	0.15		14
El Camino Real at Maple Avenue SB		6:40			7:40	8:49	9:49	10:49	11:49	12:49		13:49	14:49	15:49	16:49		17:49	18:49	19:49	13:09	0.15		14
El Camino Real at Patria Circle SB		6:42			7:40	8:52	9:49	10:49	11:49	12:49		13:49	14:49	15:49	16:49		17:49	18:49	19:49	13:07	0.116666667		14
Viejo Camino at Bocina Lane SB		6:45			7:43	8:54	9:54	10:54	11:54	12:54		13:54	14:54	15:54	16:54		17:54	18:54	19:54	13:09	0.15		14
Viejo Camino at Santa Barbara Road SB		6:46			7:44	8:55	9:55	10:55	11:55	12:55		13:55	14:55	15:55	16:55		17:55	18:55	19:55	13:09	0.15		14
Viejo Camino at El Camino Real SB		6:47			7:45	8:56	9:56	10:56	11:56	12:56		13:56	14:56	15:56	16:56		17:56	18:56	19:56	13:09	0.15		14
El Camino Real at Carmel Road SB		6:48			7:48	8:57	9:57	10:57	11:57	12:57		13:57	14:57	15:57	16:57		17:57	18:57	19:57	13:09	0.15		14
El Camino Real at Santa Margarita Road SB		6:50			7:50	8:59	9:59	10:59	11:59	12:59		13:59	14:59	15:59	16:59		17:59	18:59	19:59	13:09	0.15		14
El Camino Real at Garden Farms SB		6:52			7:52	9:01	10:01	11:01	12:01	13:01		14:01	15:01	16:01	17:01		18:01	19:01	20:01	13:09	0.15		14
El Camino Real at Encina Avenue SB		6:54			7:54	9:03	10:03	11:03	12:03	13:03		14:03	15:03	16:03	17:03		18:03	19:03	20:03	13:09	0.15		14
El Camino Real at Maria Avenue SB		6:55			7:55	9:04	10:04	11:04	12:04	13:04		14:04	15:04	16:04	17:04		18:04	19:04	20:04	13:09	0.15		14
Monterey Street at Grand Avenue	6:07	7:04	7:11	7:26	8:09	9:18	10:18	11:18	12:18	13:18		14:18	15:18	16:18	17:18		18:18	19:18	20:18	13:14	0.233333333		17
Grand at Abbott	6:08	7:05	7:12	7:27	8:10															2:02	0.033333333		5
Grand at McCollum (N)	6:09	7:06	7:13	7:28	8:11															2:02	0.033333333		5
Performing Arts Center SB	6:11	7:09	7:16	7:31	8:12															2:01	0.016666667		5
Kennedy Library SB	6:13	7:11	7:18	7:33	8:15															2:02	0.033333333		5
Santa Rosa Avenue at Foothill	6:14	7:14	7:19	7:34	8:16																		5
Santa Rosa at Murray (SB)	6:17	7:18	7:19	7:34	8:22																		5
San Luis Obispo (SLO) Government Center at	6:22	7:24	7:27	7:42	8:24	9:23	10:23	11:23	12:23	13:23		14:23	15:23	16:23	17:23	17:00	18:23	19:23	20:23				18

STOP_ID	STOP_NAME	TIMES																	SPAN OF SERVICE		# of Bus Trips per Day
25	Kennedy Library SB												17:15								1
1	San Luis Obispo (SLO) Government Center at Osos and Pal	6:33	7:33	8:33	10:33	11:33	12:33	13:33	14:33	15:33	16:05	16:33	17:25	17:33	18:33	19:33	20:33				16
123	Nipomo St. at Higuera Street	6:35	7:35	8:35	10:35	11:35	12:35	13:35	14:35	15:35	16:05	16:35	17:25	17:35	18:35	19:35	20:35	14:00			16
4448	Higuera at South (S)	6:37	7:37	8:37	10:37	11:37	12:37	13:37	14:37	15:37		16:37		17:37	18:37	19:37	20:37	14:00			14
208	South Higuera St. at Margarita Ave	6:41	7:41	8:41	10:41	11:41	12:41	13:41	14:41	15:41		16:41		17:41	18:41	19:41	20:41	14:00			14
216	South Higuera at Suburban Road SB	6:42	7:42	8:42	10:42	11:42	12:42	13:42	14:42	15:42		16:42		17:42	18:42	19:42	20:42	14:00			14
145	Pismo Beach Premium Outlet Center	6:55	7:55	8:55	10:55	11:55	12:55	13:55	14:55	15:55	16:19	16:55	17:39	17:55	18:55	19:55	20:55				16
145	Pismo Beach Premium Outlet Center	7:00	8:00	9:00	11:00	12:00	13:00	14:00	15:00	16:00	16:21	17:00	17:41	18:00	19:00	20:00	21:00				
114	East Grand Avenue at El Camino Real	7:05	8:05	9:05	11:05	12:05	13:05	14:05	15:05	16:05	16:28	17:05	17:48	18:05	19:05	20:05	21:05				16
113	El Camino Real at Halcyon Rd.(Park and Ride)	7:06	8:06	9:06	11:06	12:06	13:06	14:06	15:06	16:06	16:29	17:06	17:49	18:06	19:06	20:06	21:06				16
265	Thompson Avenue at Highway 101 SB	7:12	8:12	9:12	11:12	12:12	13:12	14:12	15:12	16:12		17:14	17:56	18:14	19:14	20:14	21:14	14:02	0.033333333		15
263	Thompson Ave at Nipomo High School	7:16	8:16	9:16	11:16	12:16	13:16	14:16	15:16	16:16		17:16	17:59	18:16	19:16	20:16	21:16	14:00			15
261	Thompson Avenue at West Branch Street SB	7:18	8:18	9:18	11:18	12:18	13:18	14:18	15:18	16:18		17:18	18:00	18:18	19:18	20:18	21:18	14:00			15
226	Tefft at Carillo SB	7:19	8:19	9:19	11:19	12:19	13:19	14:19	15:19	16:19		17:19	18:05	18:19	19:19	20:19	21:19	14:00			15
26	Bradley Rd at Jones St. (Allan Hancock College)	7:31	8:31	9:31	11:31	12:31	13:31	14:31	15:31	16:31		17:31		18:31	19:31	20:31	21:31				14
102	Nicholson St. at Cypress St. (AMTRAK BUS)	7:36	8:36	9:36	11:36	12:36	13:36	14:36	15:36	16:36		17:36	18:18	18:36	19:36	20:36	21:36				15
62	Church St. at Palisade Dr. (Marian Medical Center)	7:38	8:38	9:38	11:38	12:38	13:38	14:38	15:38	16:38		17:38	18:18	18:38	19:38	20:38	21:38				15
228	Santa Maria Transit Center	7:43	8:43	9:43	11:43	12:43	13:43	14:43	15:43	16:43		17:43	18:20	18:43	19:43	20:43	21:43				15

STOP_ID	STOP_NAME	TIMES																	SPAN OF SERVICE		# of Bus Trips per Day
228	Santa Maria Transit Center	5:45	6:14	6:15	7:14		8:14	9:14	10:14	11:14	12:14	13:14	14:14	15:14	16:14	17:14	18:14	19:14			16
47	East Main Street at College Drive	5:46		6:16																	2
26	Bradley Rd at Jones St. (Allan Hancock College)		6:18		7:18		8:18	9:18	10:18	11:18	12:18	13:18	14:18	15:18	16:18	17:18	18:18	19:18			14
62	Church St. at Palisade Dr. (Marian Medical Center)		6:24		7:24		8:24	9:24	10:24	11:24	12:24	13:24	14:24	15:24	16:24	17:24	18:24	19:24			14
270	Tefft St. at Carillo St.	6:00	6:35	6:30	7:35		8:35	9:35	10:35	11:35	12:35	13:35	14:35	15:35	16:35	17:35	18:35	19:35	13:35	0.583333333	16
256	Thompson Avenue at East Branch Street NB		6:36		7:36		8:36	9:36	10:36	11:36	12:36	13:36	14:36	15:36	16:36	17:36	18:36	19:36	13:00	0.216666667	14
262	Thompson Ave at Nipomo High School	6:02	6:38	6:32	7:38		8:38	9:38	10:38	11:38	12:38	13:38	14:38	15:38	16:38	17:38	18:38	19:38	13:36	0.6	16
264	Thompson Avenue at Highway 101 NB		6:40		7:40		8:40	9:40	10:40	11:40	12:40	13:40	14:40	15:40	16:40	17:40	18:40	19:40	13:00		14
114	East Grand Avenue at El Camino Real	6:14	6:46	6:44	7:46		8:46	9:46	10:46	11:46	12:46	13:46	14:46	15:46	16:46	17:46	18:46	19:46			16
113	El Camino Real at Halcyon Rd.(Park and Ride)	6:15	6:49	6:45	7:49	7:21	8:49	9:49	10:49	11:49	12:49	13:49	14:49	15:49	16:49	17:49	18:49	19:49			17
145	Pismo Beach Premium Outlet Center	6:20	6:57	6:50	7:57	7:28	8:57	9:57	10:57	11:57	12:57	13:57	14:57	15:57	16:57	17:57	18:57	19:57			17
145	Pismo Beach Premium Outlet Center		7:00		8:00		9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00			
217	South Higuera at Suburban Road NB		7:12		8:12		9:12	10:12	11:12	12:12	13:12	14:12	15:12	16:12	17:12	18:12	19:12	20:12	13:00		14
237	South Higuera St. at Margarita Ave NB		7:15		8:15		9:15	10:15	11:15	12:15	13:15	14:15	15:15	16:15	17:15	18:15	19:15	20:15	13:00		14
158	Higuera at South (N)		7:22		8:22		9:22	10:22	11:22	12:22	13:22	14:22	15:22	16:22	17:22	18:22	19:22	20:22	13:00		14
8b	Marsh at Broad		7:26		8:26		9:26	10:26	11:26	12:26	13:26	14:26	15:26	16:26	17:26	18:26	19:26	20:26	13:00		14
1	San Luis Obispo (SLO) Government Center at Osos and Pa	6:40	7:28	7:15	8:28	7:48	9:28	10:28	11:28	12:28	13:28	14:28	15:28	16:28	17:28	18:28	19:28	20:28			17
5340	Santa Rosa Avenue at Foothill (Stenner Glen Apts)	6:45		7:20																	2
24	Kennedy Library NB	6:49		7:24																	2

STOP_ID	STOP_NAME	TIMES																	SPAN OF SERVICE		# of Bus Trips per Day
1	San Luis Obispo (SLO) Government Center at Osos and Pa	6:33	7:33	8:33	9:33	10:33	11:33	12:33	13:33	14:33	15:33	16:33	17:33	18:33	19:33	20:33			14:00		15
5340	Santa Rosa Avenue at Foothill (Stenner Glen Apts)	6:37	7:37	8:37	9:37	10:37	11:37	12:37	13:37	14:37	15:37	16:37	17:37	18:37	19:37	20:37			14:00		15
18	Romauldo Road at Parking Lot #3	6:46	7:46	8:46	9:46	10:46	11:46	12:46	13:46	14:46	15:46	16:46	17:46	18:46	19:46	20:46			14:00		15
17	Harbor St at Piney Way entering Morro Bay Park	6:55	7:55	8:55	9:55	10:55	11:55	12:55	13:55	14:55	15:55	16:55	17:55	18:55	19:55	20:55			14:00		15
	TRIP_CALENDAR_CODE																				
	BLOCK_ID																				
CALENDAR	CALENDAR_NAME																				

STOP_ID	STOP_NAME	TIMES																													SPAN OF SERVICE		# of Bus Trips per Day
17	Harbor St at Piney Way entering Morro Bay Park		7:15		8:15		9:15		10:25		11:25	12:00		13:00		14:00		15:00		16:00		17:00			18:00		19:00	20:00		20:38	21:00	21:38	14:23	0.383333333	17
16	South Bay Blvd at Quintana Road NB		7:18		8:18		9:18		10:28		11:28	12:03		13:03		14:03		15:03		16:03		17:03			18:03		19:03	20:03			21:03		13:45	0.75	15
1500	Santa Ysabel Avenue at 15th Street	6:23	7:23		8:23		9:23		10:33		11:33	12:08		13:08		14:08		15:08		16:08		17:08			18:08		19:08	20:08			21:08		14:45	0.75	16
13	11th Street at El Morro Ave	6:24	7:24		8:24		9:24		10:34		11:34	12:09		13:09		14:09		15:09		16:09		17:09			18:09		19:09	20:09			21:09		14:45	0.75	16
12	11th Street at Ramona Avenue	6:26	7:26		8:26		9:26		10:36		11:36	12:11		13:11		14:11		15:11		16:11		17:11			18:11		19:11	20:11			21:11		14:45	0.75	16
11	10th Street at Santa Ynez Avenue	6:28	7:28		8:28		9:28		10:38		11:38	12:13		13:13		14:13		15:13		16:13		17:13			18:13		19:13	20:13			21:13		14:45	0.75	16
10	10th Street at Los Osos Valley Road	6:29	7:29		8:29		9:29		10:39		11:39	12:14		13:14		14:14		15:14		16:14		17:14			18:14		19:14	20:14			21:14		14:45	0.75	16
9	Los Osos Valley Road at Palisades	6:30	7:30		8:30		9:30					12:16		13:16		14:16		15:16		16:16		17:16						20:16			21:16		14:46	0.766666667	12
8	Pine Street at Los Osos Valley Road	6:32	7:32		8:32		9:32					12:18		13:18		14:18		15:18		16:18		17:18						20:18			21:18		14:46	0.766666667	12
7	Pine Street at Loma Avenue	6:35	7:35		8:35		9:35					12:20		13:20		14:20		15:20		16:20		17:20						20:20			21:20		14:45	0.75	12
305	Ramona @ 7th	6:36	7:36		8:36		9:36					12:20		13:20		14:20		15:20		16:20		17:20						20:20			21:20		14:44	0.733333333	12
6	7th & El Morro Ave	6:38	7:38		8:38		9:38					12:22		13:22		14:22		15:22		16:22		17:22						20:22			21:22		14:44	0.733333333	12
5	2nd Street at Santa Maria Avenue - Baywood Park	6:40	7:40		8:40		9:40					12:25		13:25		14:25		15:25		16:25		17:25						20:25			21:25		14:45	0.75	12
4	Santa Ysabel Avenue at 7th Street	6:41	7:41		8:41		9:41					12:26		13:26		14:26		15:26		16:26		17:26						20:26			21:26		14:45	0.75	12
1505	Santa Ysabel Avenue at 15th Street	6:43	7:43		8:43		9:43		10:46		11:46	12:28		13:28		14:28		15:28		16:28		17:28			18:21		19:21	20:28			21:28		14:45	0.75	16
15	South Bay Blvd at Quintana Road SB	6:51	7:51		8:51		9:51		10:52		11:52	12:34		13:34		14:34		15:34		16:34		17:34			18:27		19:27	20:34			21:34		14:43	0.716666667	16
17	Harbor St at Piney Way entering Morro Bay Park	6:55	7:00	7:55	8:00	8:55	9:00	9:55	10:00	10:55	11:00	11:55	12:38	12:00	13:38	13:00	14:36	14:00	15:38	15:00	16:38	16:00	17:38	17:00	18:00	18:30	19:00	19:30	20:38	20:00		21:38	14:43	0.716666667	30
18	Romauldo Road at Parking Lot #3		7:11		8:11		9:11		10:11		11:11			12:11		13:11		14:11		15:11		16:11		17:11	18:11		19:11		20:11	20:48		21:48	14:37	0.616666667	16
135	Kansas Avenue - County Services		7:14		8:14		9:14		10:14		11:14			12:14		13:14		14:14		15:14		16:14		17:14	18:14		19:14		20:14	20:52		21:52	14:38	0.633333333	16
235	California Men's Colony		7:16		8:16		9:16		10:16		11:16			12:16		13:16		14:16		15:16		16:16		17:16	18:16		19:16		20:16	20:54		21:54	14:38	0.633333333	16
5341	Santa Rosa Avenue at Foothill		7:21		8:21		9:21		10:21		11:21			12:21		13:21		14:21		15:21		16:21		17:21	18:21		19:21		20:21	20:59		21:59	14:38	0.633333333	16
1	San Luis Obispo (SLO) Government Center at Osos and Palm		7:25		8:25		9:25		10:25		11:25			12:25		13:25		14:25		15:25		16:25		17:25	18:25		19:25		20:25	21:03		22:03	14:38	0.633333333	16

STOP_ID	STOP_NAME	TIMES							SPAN OF SERVICE	# of Bus Trips per Day
1	San Luis Obispo (SLO) Government Center at Osos and Palm	7:42	8:03	9:03	10:03	13:03	14:03	15:03	7:21	7
5340	Santa Rosa Avenue at Foothill (Stenner Glen Apts)	7:45	8:06	9:06	10:06	13:06	14:06	15:06	7:21	7
235	California Men's Colony	7:50	8:11	9:11	10:11	13:11	14:11	15:11	7:21	7
135	Kansas Avenue - County Services	7:52	8:13	9:13	10:13	13:13	14:13	15:13	7:21	7
18	Romauldo Road at Parking Lot #3	7:55	8:16	9:16	10:16	13:16	14:16	15:16	7:21	7
29	Achievement House	7:59								
	TRIP_CALENDAR_CODE									
	BLOCK_ID									
CALENDAR_CODE	CALENDAR_NAME									

STOP_ID	STOP_NAME	TIMES							SPAN OF SERVICE	# of Bus Trips per Day
29	Achievement House									
18	Romauldo Road at Parking Lot #3	8:48	9:48	10:48	13:48	14:48	15:30		6:42	6
135	Kansas Avenue - County Services	8:51	9:51	10:51	13:51	14:51	15:33		6:42	6
235	California Men's Colony	8:52	9:52	10:52	13:52	14:52	15:34		6:42	6
5341	Santa Rosa Avenue at Foothill	8:56	9:56	10:56	13:56	14:56	15:38		6:42	6
1	San Luis Obispo (SLO) Government Center at Osos and Palm	9:00	10:00	11:00	14:00	15:00	15:45		6:45	6

STOP_ID	STOP_NAME	TIMES					SPAN OF SERVICE		# of Bus Trips per Day
201	Hearst Castle Info. Center		8:00	11:00	14:00	17:00			4
175	Hearst Drive	6:05	8:05	11:05	14:05	17:07	11:02	0.033333	5
139	Moonstone Beach Drive at San Simeon Pines Resort SB	6:11	8:11	11:11	14:11	17:12	11:01	0.016667	5
137	Moonstone Beach Drive at Castle Inn SB	6:12	8:13	11:13	14:13	17:13	11:01	0.016667	5
72	Moonstone Beach Drive at Mariners Inn SB	6:13	8:14	11:14	14:14	17:14	11:01	0.016667	5
176	Moonstone Drive at Windsor	6:14	8:15	11:15	14:15	17:15	11:01	0.016667	5
143	Main Street at Arlington Street SB	6:15	8:15	11:15	14:15	17:15	11:00		5
197	Main Street at The Veteran's Hall SB	6:15	8:16	11:16	14:16	17:16	11:01	0.016667	5
177	Main Street at Tamson Street SB	6:16	8:16	11:16	14:16	17:16	11:00		5
246	Main Street at The Bluebird Inn SB	6:17	8:17	11:17	14:17	17:17	11:00		5
179	Burton at Main St. (SB)	6:17	8:17	11:17	14:17	17:17	11:00		5
181	Burton Drive at Cambria Pines Lodge SB	6:18	8:20	11:20	14:20	17:20	11:02	0.033333	5
184	Burton Drive at Ardath Drive SB	6:19	8:23	11:23	14:23	17:23	11:04	0.066667	5
185	Ardath at Hwy 1	6:19	8:26	11:26	14:26	17:26	11:07	0.116667	5
187	Ocean Blvd. at Cayucos (SB)	6:40	8:40	11:40	14:40	17:40	11:00		5
192	South Ocean Avenue at 3rd Street SB	6:41	8:41	11:41	14:41	17:41	11:00		5
274	Ocean Boulevard at 9th Street SB	6:42	8:42	11:42	14:42	17:42	11:00		5
65	South Ocean Boulevard at Old Creek Road SB	6:44	8:44	11:44	14:44	17:44	11:00		5
193	Main St. at San Jacinto	6:48	8:48	11:48	14:48	17:48	11:00		5
243	Main St. at Errol St. SB	6:51	8:51	11:51	14:51	17:51	11:00		5
17	Harbor St at Piney Way entering Morro Bay Park	6:55	8:55	11:55	14:55	17:55	11:00		5

STOP_ID	STOP_NAME	TIMES					SPAN OF SERVICE	# of Bus Trips per Day
17	Harbor St at Piney Way entering Morro Bay Park	7:02	10:02	12:02	15:02	18:02	11:00	5
66	South Ocean Boulevard at Old Creek Road NB	7:11	10:11	12:11	15:11	18:11	11:00	5
267	Ocean Boulevard at 8th Street NB	7:14	10:14	12:14	15:14	18:14	11:00	5
191	South Ocean Avenue at 4th Street NB	7:14	10:14	12:14	15:14	18:14	11:00	5
188	Ocean Blvd. at Cayucos (NB)	7:15	10:15	12:15	15:15	18:15	11:00	5
186	Ardath at Hwy 1	7:27	10:27	12:27	15:27	18:27	11:00	5
183	Burton Drive at Ardath Drive NB	7:29	10:29	12:29	15:29	18:29	11:00	5
182	Burton Drive at Yorkshire Drive	7:31	10:31	12:31	15:31	18:31	11:00	5
180	Burton at Main NB	7:34	10:34	12:34	15:34	18:34	11:00	5
178	Main Street at Tamson Street NB	7:36	10:36	12:36	15:36	18:36	11:00	5
64	Main Street at The Veteran's Hall NB	7:38	10:38	12:38	15:38	18:38	11:00	5
10214627	Main at Arlington (West Village)	7:39	10:39	12:39	15:39	18:39	11:00	5
194	Moonstone Dr. at Windsor Blvd. NB	7:40	10:40	12:40	15:40	18:40	11:00	5
71	Moonstone Beach Drive at Mariners Inn NB	7:41	10:41	12:41	15:41	18:41	11:00	5
136	Moonstone Beach Drive at Fireside Inn NB	7:42	10:42	12:42	15:42	18:42	11:00	5
138	Moonstone Beach Drive at San Simeon Pines Resort I	7:43	10:43	12:43	15:43	18:43	11:00	5
174	Castillo Drive at Otter Way NB	7:47	10:47	12:47	15:47	18:47	11:00	5
201	Hearst Castle Info. Center	7:54	10:54	12:54	15:54			4

APPENDIX E: Final Dataset Spreadsheet (Basis of Analysis)

General Bus Stop Info					RTA Ridership (Ob		
						Boardings	
Bus Stop #	Fixed Route Name	Route Direction	Bus Stop Name	City	PCT of System ONS	Observed Ons	Model Ons
1	RTA 9, 10, 12/14	Northbound, Southbound	Government Center (Osos & Palm)	SLO	22.72%	2339	7264
2	RTA 12, 15	Northbound, Southbound, Clockwise loop	MORRO BAY PARK	Morro Bay	5.20%	536	236
3	RTA 9, 10, 12	Northbound	Cal Poly Kennedy Library	SLO	4.46%	459	111
4	RTA 9, 10	Northbound	Cal Poly Performing Arts Cntr.	SLO	1.52%	156	144
5	RTA 9, 10, 12/14	Northbound	Santa Rosa at Stenner Glen Apts (NB)	SLO	2.50%	257	77
6	RTA 9, 12/14	Southbound	Santa Rosa at Foothill	SLO	0.16%	16	44
7	RTA 9	Northbound, Southbound	Atascadero Transit Center	Atascadero	5.08%	522	332
8	RTA 9	Northbound, Southbound	Las Tablas Park & Ride	Templeton	2.11%	217	188
9	RTA 9	Northbound, Southbound	Twin Cities Hospital	Templeton	0.42%	43	121
10	RTA 9	Northbound, Southbound	Paso Robles Transit Center (8th & Pine)	Paso Robles	6.10%	628	218
11	RTA 9	Northbound, Southbound	Cuesta College North	Paso Robles	0.98%	101	60
12	RTA 9	Northbound	Monterey at Peach Tree Inn (NB)	SLO	0.55%	56	9
13	RTA 9	Northbound	ECR at Maria	Santa Margarita	0.07%	7	11
14	RTA 9	Northbound	ECR at Encina	Santa Margarita	0.49%	50	37
15	RTA 9	Northbound	ECR at Pine (Garden Farms)	Atascadero	0.06%	6	11
16	RTA 9	Northbound	ECR at Santa Margarita (Country Care)	Atascadero	0.08%	8	11

17	RTA 9	Northbound	ECR at Carmel	Atascadero	0.00%	0	18
18	RTA 9	Northbound	ECR at Santa Clara	Atascadero	0.01%	1	37
19	RTA 9	Northbound	Viejo Camino at Santa Barbara	Atascadero	0.02%	2	11
20	RTA 9	Northbound	Viejo Camino at Bocina Ln (Bordeaux Apts)	Atascadero	0.61%	63	25
21	RTA 9	Northbound	ECR at Avenida Maria (NB)	Atascadero	0.28%	29	52
22	RTA 9	Northbound	ECR at Musselman (NB)	Atascadero	0.20%	20	25
23	RTA 9	Northbound	ECR at El Bordo (Post Office)	Atascadero	0.15%	15	25
24	RTA 9	Northbound	ECR at Principal (NB)	Atascadero	0.13%	13	25
25	RTA 9	Northbound	ECR at Solano (NB)	Atascadero	0.14%	14	52
26	RTA 9	Northbound	ECR at Palomar (NB)	Atascadero	0.31%	32	52
27	RTA 9	Northbound	ECR at Pueblo	Atascadero	0.09%	10	20
28	RTA 9	Northbound	ECR at Vons (NB)	Atascadero	0.28%	29	41
29	RTA 9	Northbound	ECR at Traffic Way	Atascadero	0.24%	25	41
30	RTA 9	Northbound	ECR at Rosario (Police Station)	Atascadero	0.00%	0	41
31	RTA 9	Northbound	ECR at San Jacinto	Atascadero	0.07%	8	20
32	RTA 9	Northbound	ECR at San Anselmo (Kmart)	Atascadero	0.17%	18	41
33	RTA 9	Northbound	ECR at Maya (Kennedy Club)	Atascadero	0.07%	8	20
34	RTA 9	Northbound	ECR at San Benito	Atascadero	0.10%	10	13
35	RTA 9	Northbound	ECR at Del Rio	Atascadero	0.20%	20	20
36	RTA 9	Northbound	ECR at Atalaya	Atascadero	0.20%	20	20

37	RTA 9	Northbound	ECR at Santa Cruz	Atascadero	0.07%	8	20
38	RTA 9	Northbound	Theatre at Theatre	Paso Robles	0.34%	35	16
39	RTA 9	Northbound	South Vine at 1st (Gateway Center)	Paso Robles	0.00%	0	4
40	RTA 9	Northbound	Spring at 2nd	Paso Robles	0.29%	30	8
41	RTA 9	Northbound	Spring at 5th	Paso Robles	0.27%	28	27
42	RTA 9	Northbound	Mission at 14th	San Miguel	0.00%	0	5
43	RTA 9	Southbound	Mission at 14th	San Miguel	0.43%	44	4
44	RTA 9	Southbound	Spring at 4th	Paso Robles	0.20%	20	26
45	RTA 9	Southbound	Target Shopping Center	Paso Robles	0.27%	28	47
46	RTA 9	Southbound	ECR at Atalaya	Atascadero	0.02%	3	23
47	RTA 9	Southbound	ECR at Del Rio (Mission Oaks Plaza)	Atascadero	0.22%	23	47
48	RTA 9	Southbound	ECR at San Benito	Atascadero	0.07%	8	23
49	RTA 9	Southbound	ECR at Cynthia (Kennedy Club)	Atascadero	0.15%	15	23
50	RTA 9	Southbound	ECR at San Anselmo (Kmart)	Atascadero	0.12%	13	47
51	RTA 9	Southbound	ECR at San Anselmo (Lutheran Church)	Atascadero	0.02%	3	23
52	RTA 9	Southbound	ECR at Rosario	Atascadero	0.07%	8	47
53	RTA 9	Southbound	ECR at Entrada	Atascadero	0.24%	25	23
54	RTA 9	Southbound	ECR at Hwy 41 (SB)	Atascadero	1.28%	132	47
55	RTA 9	Southbound	ECR at Pueblo	Atascadero	0.16%	17	23
56	RTA 9	Southbound	ECR at Albertson's (SB)	Atascadero	0.07%	8	47

57	RTA 9	Southbound	ECR @ Plata (DK Donuts) (SB)	Atascadero	0.40%	41	23
58	RTA 9	Southbound	ECR at Santa Rosa (Motel 6) (SB)	Atascadero	0.10%	10	23
59	RTA 9	Southbound	ECR at El Bordo (Post Office)	Atascadero	0.71%	73	47
60	RTA 9	Southbound	ECR at Maple (SB)	Atascadero	0.47%	48	23
61	RTA 9	Southbound	Viejo Camino at Bocina (Bordeaux Apts)	Atascadero	0.63%	65	15
62	RTA 9	Southbound	Viejo Camino at Santa Barbara	Atascadero	0.23%	23	15
63	RTA 9	Southbound	ECR at Santa Clara	Atascadero	0.03%	3	16
64	RTA 9	Southbound	ECR at Carmel	Atascadero	0.05%	5	16
65	RTA 9	Southbound	ECR @ Santa Margarita	Atascadero	0.09%	9	11
66	RTA 9	Southbound	ECR at Patria Circle (SB)	Atascadero	0.28%	29	34
67	RTA 9	Southbound	ECR @ Pine (Garden Farms)	Atascadero	0.03%	3	11
68	RTA 9	Southbound	ECR at Encina	Santa Margarita	0.84%	87	48
69	RTA 9	Southbound	ECR at Maria	Santa Margarita	0.06%	6	16
70	RTA 9	Southbound	Monterey at Grand (SB)	SLO	0.02%	2	35
71	RTA 9	Southbound	Cal Poly Performing Arts	SLO	0.07%	7	55
72	RTA 9	Southbound	Cal Poly Kennedy Library	SLO	0.14%	14	55
73	RTA 10	Northbound, Southbound	Pismo Beach Premiun Outlets	Pismo Beach	4.34%	447	183
74	RTA 10	Northbound, Southbound	El Camino Real at Halcyon	Arroyo Grande	2.63%	270	302
75	RTA 10	Northbound, Southbound	E. Grand at El Camino Real	Arroyo Grande	1.76%	182	363
76	RTA 10	Northbound, Southbound	S. Bradley at Jones	Santa Maria	1.71%	177	139

77	RTA 10	Northbound, Southbound	Nicholson at E. Cypress	Santa Maria	0.37%	38	102
78	RTA 10	Northbound, Southbound	E. Church at Palisade	Santa Maria	0.52%	53	142
79	RTA 10	Northbound, Southbound	Santa Maria Transit Center	Santa Maria	3.35%	345	684
80	RTA 10	Northbound	Tefft at Carrillo	Nipomo	1.60%	164	57
81	RTA 10	Northbound	Thompson at Branch	Nipomo	0.61%	63	50
82	RTA 10	Northbound	Nipomo High School	Nipomo	0.36%	37	57
83	RTA 10	Northbound	N. Thompson at Hwy 101	Nipomo	0.16%	16	11
84	RTA 10	Northbound	S. Higuera at Suburban	SLO	0.35%	36	64
85	RTA 10	Northbound	S. Higuera at Margarita	SLO	0.29%	30	26
86	RTA 10	Northbound	Higuera at South	SLO	0.29%	30	27
87	RTA 10	Northbound	Marsh at Broad (NB)	SLO	0.00%	0	340
88	RTA 10	Southbound	Nipomo at Higuera (SB)	SLO	0.02%	2	31
89	RTA 10	Southbound	Higuera at South	SLO	0.81%	84	57
90	RTA 10	Southbound	S. Higuera at Margarita	SLO	0.47%	48	26
91	RTA 10	Southbound	S. Higuera at Suburban	SLO	0.61%	63	197
92	RTA 10	Southbound	N. Thompson at Hwy 101	Nipomo	0.00%	0	12
93	RTA 10	Southbound	Nipomo High School	Nipomo	0.07%	7	53
94	RTA 10	Southbound	Thompson at Branch	Nipomo	0.34%	35	53
95	RTA 10	Southbound	Tefft at Carrilo	Nipomo	0.88%	91	53
96	RTA 12/14	Northbound, Southbound	Cuesta College	SLO	7.34%	755	337

97	RTA 12/14	Northbound	CA Men's Colony	SLO	0.01%	1	192
98	RTA 12	Northbound	South Bay at Quintana	Morro Bay	0.05%	5	27
99	RTA 12	Clockwise loop	Santa Ysabel at 15th (WB)	Los Osos	0.14%	14	36
100	RTA 12	Clockwise loop	11th at El Morro	Los Osos	0.26%	27	57
101	RTA 12	Clockwise loop	11th @ Ramona	Los Osos	0.27%	28	33
102	RTA 12	Clockwise loop	10th at Santa Ynez	Los Osos	0.75%	78	69
103	RTA 12	Clockwise loop	10th at LOVR	Los Osos	0.85%	88	69
104	RTA 12	Clockwise loop	LOVR at Palisades	Los Osos	0.24%	25	21
105	RTA 12	Clockwise loop	Pine at LOVR	Los Osos	0.62%	64	21
106	RTA 12	Clockwise loop	Pine at Loma	Los Osos	0.41%	42	44
107	RTA 12	Clockwise loop	Ramona at 7th	Los Osos	0.45%	46	87
108	RTA 12	Clockwise loop	7th at El Morro	Los Osos	0.23%	23	27
109	RTA 12	Clockwise loop	2nd at Santa Maria	Los Osos	0.21%	21	42
110	RTA 12	Clockwise loop	Santa Ysabel @ 7th	Los Osos	0.28%	29	42
111	RTA 12	Clockwise loop	Santa Ysabel at 15th (EB)	Los Osos	0.31%	32	57
112	RTA 12	Southbound	South Bay at Quintana	Morro Bay	0.18%	18	29
113	RTA 12/14	Southbound	Kansas at Hwy 1	SLO	0.28%	29	105
114	RTA 15	Northbound, Southbound	HEARST CASTLE VISITOR'S CENTER	San Simeon	0.10%	10	23
115	RTA 15	Northbound	SOUTH OCEAN @ OLD CREEK	Cayucos	0.00%	0	6
116	RTA 15	Northbound	OCEAN @ 8TH (NB)	Cayucos	0.00%	0	4

117	RTA 15	Northbound	OCEAN @ 3RD (NB)	Cayucos	0.00%	0	4
118	RTA 15	Northbound	CAYUCOS @ ASH (NB)	Cayucos	0.08%	8	4
119	RTA 15	Northbound	ARDATH @ HWY 1	Cambria	0.01%	1	6
120	RTA 15	Northbound	BURTON @ ARDATH	Cambria	0.00%	0	6
121	RTA 15	Northbound	Not on printed schedule"BURTON @ YORKSHIRE"	Cambria	0.02%	2	9
122	RTA 15	Northbound	BURTON @ MAIN ST.	Cambria	0.00%	0	3
123	RTA 15	Northbound	MAIN @ BLUEBIRD INN	Cambria	0.00%	0	2
124	RTA 15	Northbound	Not on printed schedule "MAIN @ TAMSON (NB)"	Cambria	0.00%	0	2
125	RTA 15	Northbound	Not on printed schedule "MAIN @ SKATE PARK	Cambria	0.03%	3	3
126	RTA 15	Northbound	No on printed schedule "MAIN @ CORNWALL"	Cambria	0.00%	0	4
127	RTA 15	Northbound	MOONSTONE @ WINDSOR	Cambria	0.01%	1	2
128	RTA 15	Northbound	Not on printed schedule "MOONSTONE @ MARINERS INN (NB)"	Cambria	0.00%	0	3
129	RTA 15	Northbound	Not on printed schedule: "MOONSTONE @ FIRESIDE INN"	Cambria	0.00%	0	3
130	RTA 15	Northbound	MOONSTONE @ SAN SIMEON PINES LODGE	Cambria	0.00%	0	2
131	RTA 15	Northbound	CASTILLO @ OTTER (NB ONLY)	San Simeon	0.00%	0	6
132	RTA 15	Southbound	HEARST @ SAN SIMEON (SB ONLY)	San Simeon	0.00%	0	6
133	RTA 15	Southbound	MOONSTONE @ SAN SIMEON PINES LODGE	Cambria	0.00%	0	2
134	RTA 15	Southbound	Not on printed schedule: "MOONSTONE @ CASTLE INN"	Cambria	0.00%	0	3
135	RTA 15	Southbound	Not in printed schedule "MOONSTONE @ MARINERS INN (SB)"	Cambria	0.00%	0	3
136	RTA 15	Southbound	MOONSTONE @ WINDSOR	Cambria	0.06%	6	3

137	RTA 15	Southbound	Not in printed schedule "MAIN @ ARLINGTON"	Cambria	0.07%	7	2
138	RTA 15	Southbound	MAIN @ VETS HALL	Cambria	0.03%	3	3
139	RTA 15	Southbound	Not on printed schedule "Main @ Tamson (SB)"	Cambria	0.05%	5	3
140	RTA 15	Southbound	MAIN STREET @ BLUEBIRD INN	Cambria	0.03%	3	3
141	RTA 15	Southbound	BURTON @ MAIN	Cambria	0.13%	13	10
142	RTA 15	Southbound	BURTON @ CAMBRIA PINES LODGE	Cambria	0.06%	6	9
143	RTA 15	Southbound	BURTON @ ARDATH	Cambria	0.16%	16	9
144	RTA 15	Southbound	ARDATH @ HWY 1	Cambria	0.08%	8	9
145	RTA 15	Southbound	OCEAN @ CAYUCOS PIER (SB)	Cayucos	0.11%	11	6
146	RTA 15	Southbound	OCEAN @ 3RD (SB)	Cayucos	0.09%	9	6
147	RTA 15	Southbound	OCEAN @ 9TH (SB)	Cayucos	0.11%	11	6
148	RTA 15	Southbound	SOUTH OCEAN @ OLD CREEK	Cayucos	0.04%	4	4
149	RTA 15	Southbound	HWY 1 @ SAN JACINTO	Morro Bay	0.09%	9	10

bserved & Model)								
			TIGER / Line Tract Info					
Aligthings			Census Tract #	Census Tract Land Area		Total Resident Population		
PCT of SYSTEM OFFS	Observed Offs	Model Offs		Actual Tract Area [sqmi]	Capped Tract _sqmi	Res Pop	Res Pop Density	Res Male
20.12%	2065	1993	111.01	0.63	0.63	3592	5739.2	1858
4.46%	458	358	106.03	4.14	4.14	1287	311	619
1.11%	114	44	109.01	7.05	7.05	8319	1181	4593
0.43%	44	44	109.01	7.05	7.05	8319	1181	4593
0.25%	26	151	109.01	7.05	7.05	8319	1181	4593
2.19%	224	73	112.00	5.76	5.76	7355	1278	3984
4.40%	452	406	125.02	1.92	1.92	4985	2602	2486
1.93%	198	256	127.04	44.55	20.00	8650	433	4153
0.49%	50	205	127.04	44.55	20.00	8650	433	4153
6.02%	618	426	101.02	2.42	2.42	6989	2886	3498
1.10%	113	89	102.01	16.66	16.66	6981	419	3319
0.05%	5	41	110.02	2.07	2.07	2877	1390	1529
0.12%	12	19	127.02	1110.75	20.00	6550	328	3269
0.68%	69	35	127.02	1110.75	20.00	6550	328	3269
0.06%	6	19	127.02	1110.75	20.00	6550	328	3269
0.08%	8	19	127.02	1110.75	20.00	6550	328	3269

0.06%	6	19	127.02	1110.75	20.00	6550	328	3269
0.08%	8	19	127.02	1110.75	20.00	6550	328	3269
0.11%	11	19	127.02	1110.75	20.00	6550	328	3269
1.56%	160	40	125.03	1.76	1.76	5240	2975	2449
0.93%	96	40	125.03	1.76	1.76	5240	2975	2449
0.50%	51	40	125.03	1.76	1.76	5240	2975	2449
0.52%	54	40	125.03	1.76	1.76	5240	2975	2449
0.12%	12	40	125.03	1.76	1.76	5240	2978	2449
0.28%	29	40	125.03	1.76	1.76	5240	2978	2449
0.59%	61	40	125.03	1.76	1.76	5240	2978	2449
0.31%	32	30	125.02	1.92	1.92	4985	2602	2486
1.50%	153	30	125.02	1.92	1.92	4985	2602	2486
0.44%	45	16	125.05	3.25	3.25	4891	1504	2440
0.05%	5	16	125.05	3.25	3.25	4891	1504	2440
0.15%	15	16	125.05	3.25	3.25	4891	1504	2440
0.12%	13	16	125.05	3.25	3.25	4891	1504	2440
0.07%	8	16	125.05	3.25	3.25	4891	1504	2440
0.07%	8	16	125.05	3.25	3.25	4891	1504	2440
0.07%	8	16	125.05	3.25	3.25	4891	1504	2440
0.02%	3	16	125.05	3.25	3.25	4891	1504	2440

0.02%	3	16	125.05	3.25	3.25	4891	1504	2440
0.20%	20	20	127.04	44.55	20.00	8650	433	4153
0.00%	0	7	101.02	2.42	2.42	6989	2886	3498
0.00%	0	18	101.02	2.42	2.42	6989	2886	3498
0.29%	30	18	101.02	2.42	2.42	6989	2886	3498
0.25%	25	3	103.00	650.09	20.00	10043	502	5024
0.00%	0	2	103.00	650.09	20.00	10043	502	5024
0.34%	35	19	101.02	2.42	2.42	6989	2886	3498
0.17%	18	20	127.04	44.55	20.00	8650	433	4153
0.27%	28	14	126.00	5.22	5.22	7793	1494	3834
0.10%	10	14	126.00	5.22	5.22	7793	1494	3834
0.00%	0	14	126.00	5.22	5.22	7793	1494	3834
0.12%	13	14	126.00	5.22	5.22	7793	1494	3834
0.02%	3	14	126.00	5.22	5.22	7793	1494	3834
0.05%	5	14	126.00	5.22	5.22	7793	1494	3834
0.05%	5	14	126.00	5.22	5.22	7793	1494	3834
0.02%	3	14	126.00	5.22	5.22	7793	1494	3834
0.21%	21	14	126.00	5.22	5.22	7793	1494	3834
0.18%	18	14	126.00	5.22	5.22	7793	1494	3834
0.05%	5	14	126.00	5.22	5.22	7793	1494	3834

0.14%	15	14	126.00	5.22	5.22	7793	1494	3834
0.02%	3	14	126.00	5.22	5.22	7793	1494	3834
0.30%	31	14	126.00	5.22	5.22	7793	1494	3834
0.23%	23	14	126.00	5.22	5.22	7793	1494	3834
0.51%	53	41	125.03	1.76	1.76	5240	2978	2449
0.13%	13	41	125.03	1.76	1.76	5240	2978	2449
0.08%	8	19	127.02	1110.75	20.00	6550	328	3269
0.07%	7	19	127.02	1110.75	20.00	6550	328	3269
0.07%	7	19	127.02	1110.75	20.00	6550	328	3269
0.15%	15	19	127.02	1110.75	20.00	6550	328	3269
0.10%	10	19	127.02	1110.75	20.00	6550	328	3269
0.61%	62	36	127.02	1110.75	20.00	6550	328	3269
0.11%	11	19	127.02	1110.75	20.00	6550	328	3269
1.28%	132	90	110.02	2.07	2.07	2877	1388	1529
1.85%	190	249	109.01	7.05	7.05	8319	1181	4593
3.84%	394	462	109.01	7.05	7.05	8319	1181	4593
3.69%	378	213	117.01	8.52	8.52	4301	505	2032
1.96%	201	190	119.01	2.27	2.27	2987	1318	1428
2.48%	255	190	119.01	2.27	2.27	2987	1318	1428
2.10%	215	116	21.02	0.52	0.52	2084	3991	1036

0.07%	7	25	22.11	3.45	3.45	5366	1555	2501
0.29%	30	25	22.11	3.45	3.45	5366	1555	2501
2.95%	303	143	21.01	0.53	0.53	3873	7249	1960
0.77%	80	41	124.01	4.68	4.68	6621	1415	3291
0.30%	31	35	124.01	4.68	4.68	6621	1415	3291
0.22%	22	41	124.01	4.68	4.68	6621	1415	3291
0.18%	18	13	123.02	365.38	20.00	5137	257	2587
0.79%	82	13	115.03	10.34	10.34	3624	350	1765
0.75%	76	109	111.03	1.92	1.92	2737	1426	1368
0.96%	99	5	111.01	0.63	0.63	3592	5739	1858
0.70%	71	441	111.02	0.89	0.89	5127	5771	2640
0.00%	0	6	111.01	0.63	0.63	3592	5739	1858
0.20%	20	5	111.01	0.63	0.63	3592	5739	1858
0.41%	42	98	111.03	1.92	1.92	2737	1426	1368
0.26%	27	93	115.01	0.54	0.54	1783	3301	853
0.11%	11	13	123.02	365.38	20.00	5137	257	2587
0.45%	46	36	124.01	4.68	4.68	6621	1415	3291
0.46%	47	36	124.01	4.68	4.68	6621	1415	3291
1.09%	112	36	124.01	4.68	4.68	6621	1415	3291
9.47%	972	360	115.04	110.15	20.00	1362	68	944

0.08%	8	10	114.00	0.52	0.52	6446	34.7	6445
0.10%	10	14	106.02	2.02	2.02	3836	1901	1851
0.38%	39	26	107.01	0.93	0.93	4650	5017	2281
0.50%	51	26	107.01	0.93	0.93	4650	5017	2281
0.47%	48	60	107.03	1.55	1.55	3487	2253	1759
0.88%	91	60	107.03	1.55	1.55	3487	2253	1759
0.93%	96	60	107.03	1.55	1.55	3487	2253	1759
0.20%	20	17	107.07	9.65	9.65	5751	596	2734
0.45%	46	17	107.07	9.65	9.65	5751	596	2734
0.28%	29	17	107.07	9.65	9.65	5751	596	2734
0.26%	27	18	107.01	0.93	0.93	4650	5017	2281
0.16%	16	18	107.01	0.93	0.93	4650	5017	2281
0.17%	17	18	107.01	0.93	0.93	4650	5017	2281
0.09%	9	18	107.01	0.93	0.93	4650	5017	2281
0.03%	3	26	107.01	0.93	0.93	4650	5017	2281
0.12%	12	14	106.02	2.02	2.02	3836	1901	1851
0.14%	14	75	115.04	110.15	20.00	1362	68	944
0.09%	9	23	130.00	364.66	20.00	2539	127	1296
0.02%	2	6	105.04	4.03	4.03	2592	643	1241
0.07%	7	6	105.04	4.03	4.03	2592	643	1241

0.06%	6	6	105.04	4.03	4.03	2592	643	1241
0.03%	3	6	105.04	4.03	4.03	2592	643	1241
0.04%	4	5	104.03	6.65	6.65	3788	570	1816
0.17%	17	5	104.03	6.65	6.65	3788	570	1816
0.05%	5	5	104.03	6.65	6.65	3788	570	1816
0.15%	15	3	104.04	5.21	5.21	2249	432	1054
0.00%	0	3	104.04	5.21	5.21	2249	432	1054
0.04%	4	3	104.04	5.21	5.21	2249	432	1054
0.07%	7	3	104.04	5.21	5.21	2249	432	1054
0.01%	1	3	104.04	5.21	5.21	2249	432	1054
0.09%	9	3	104.04	5.21	5.21	2249	432	1054
0.00%	0	3	104.04	5.21	5.21	2249	432	1054
0.00%	0	3	104.04	5.21	5.21	2249	432	1054
0.02%	2	3	104.04	5.21	5.21	2249	432	1054
0.03%	3	5	130.00	364.66	20.00	2539	127	1296
0.00%	0	5	130.00	364.66	20.00	2539	127	1296
0.07%	7	3	104.04	5.21	5.21	2249	432	1054
0.00%	0	3	104.04	5.21	5.21	2249	432	1054
0.00%	0	3	104.04	5.21	5.21	2249	432	1054
0.00%	0	3	104.04	5.21	5.21	2249	432	1054

0.00%	0	3	104.04	5.21	5.21	2249	432	1054
0.00%	0	3	104.04	5.21	5.21	2249	432	1054
0.00%	0	3	104.04	5.21	5.21	2249	432	1054
0.01%	1	3	104.04	5.21	5.21	2249	432	1054
0.00%	0	5	104.04	5.21	5.21	2249	432	1054
0.00%	0	5	104.03	6.65	6.65	3788	570	1816
0.00%	0	5	104.03	6.65	6.65	3788	570	1816
0.00%	0	5	104.03	6.65	6.65	3788	570	1816
0.07%	7	6	105.04	4.03	4.03	2592	643	1241
0.03%	3	6	105.04	4.03	4.03	2592	643	1241
0.01%	1	6	105.04	4.03	4.03	2592	643	1241
0.05%	5	6	105.04	4.03	4.03	2592	643	1241
0.06%	6	9	105.03	3.17	3.17	5339	1682	2639

Gender			Resident Age								
Res Male Density	Res Female	Res Female Density	Res <18	Res <18 Density	Res >18	Res >18 Density	Res 20 to 24	Res 20 to 24 Density	Res 25 to 34	Res 25 to 34 Density	Res 35 to 49
2968.7	1734	2770.5	265	423.4	3327	5315.8	1213	1938.1	809	1292.6	488
149.6	668	161.5	167	40.4	1120	270.7	59	14.3	177	42.8	189
651.9	3726	528.9	58	8.2	8261	1172.6	2700	383.2	134	19.0	55
651.9	3726	528.9	58	8.2	8261	1172.6	2700	383.2	134	19.0	55
651.9	3726	528.9	58	8.2	8261	1172.6	2700	383.2	134	19.0	55
692.2	3371	585.7	6642	1154.0	2862	497.2	2862	497.2	696	120.9	769
1297.6	2499	1304.4	1232	643.1	3753	1959.0	367	191.6	851	444.2	1019
207.7	4497	224.9	1802	90.1	6848	342.4	344	17.2	589	29.5	1560
207.7	4497	224.9	1802	90.1	6848	342.4	344	17.2	589	29.5	1560
1444.5	3491	1441.6	1950	805.3	5039	2080.9	678	280.0	1299	536.4	1266
199.2	3662	219.8	1712	102.8	5269	316.2	269	16.1	716	43.0	1387
738.5	1348	651.0	287	138.6	2590	1250.9	975	470.9	359	173.4	342
163.5	3281	164.1	1340	67.0	5210	260.5	347	17.4	625	31.3	1279
163.5	3281	164.1	1340	67.0	5210	260.5	347	17.4	625	31.3	1279
163.5	3281	164.1	1340	67.0	5210	260.5	347	17.4	625	31.3	1279
163.5	3281	164.1	1340	67.0	5210	260.5	347	17.4	625	31.3	1279

163.5	3281	164.1	1340	67.0	5210	260.5	347	17.4	625	31.3	1279
163.5	3281	164.1	1340	67.0	5210	260.5	347	17.4	625	31.3	1279
163.5	3281	164.1	1340	67.0	5210	260.5	347	17.4	625	31.3	1279
1390.5	2791	1584.7	1236	701.8	4004	2273.4	398	226.0	877	498.0	980
1390.5	2791	1584.7	1236	701.8	4004	2273.4	398	226.0	877	498.0	980
1390.5	2791	1584.7	1236	701.8	4004	2273.4	398	226.0	877	498.0	980
1390.5	2791	1584.7	1236	701.8	4004	2273.4	398	226.0	877	498.0	980
1391.9	2791	1586.2	1236	702.5	4004	2275.6	398	226.2	877	498.4	980
1391.9	2791	1586.2	1236	702.5	4004	2275.6	398	226.2	877	498.4	980
1391.9	2791	1586.2	1236	702.5	4004	2275.6	398	226.2	877	498.4	980
1297.6	2499	1304.4	1232	643.1	3753	1959.0	367	191.6	851	444.2	1019
1297.6	2499	1304.4	1232	643.1	3753	1959.0	367	191.6	851	444.2	1019
750.2	2451	753.6	1145	352.0	3746	1151.7	284	87.3	587	180.5	1032
750.2	2451	753.6	1145	352.0	3746	1151.7	284	87.3	587	180.5	1032
750.2	2451	753.6	1145	352.0	3746	1151.7	284	87.3	587	180.5	1032
750.2	2451	753.6	1145	352.0	3746	1151.7	284	87.3	587	180.5	1032
750.2	2451	753.6	1145	352.0	3746	1151.7	284	87.3	587	180.5	1032
750.2	2451	753.6	1145	352.0	3746	1151.7	284	87.3	587	180.5	1032
750.2	2451	753.6	1145	352.0	3746	1151.7	284	87.3	587	180.5	1032
750.2	2451	753.6	1145	352.0	3746	1151.7	284	87.3	587	180.5	1032

750.2	2451	753.6	1145	352.0	3746	1151.7	284	87.3	587	180.5	1032
207.7	4497	224.9	1802	90.1	6848	342.4	344	17.2	589	29.5	1560
1444.5	3491	1441.6	1950	805.3	5039	2080.9	678	280.0	1299	536.4	1266
1444.5	3491	1441.6	1950	805.3	5039	2080.9	678	280.0	1299	536.4	1266
1444.5	3491	1441.6	1950	805.3	5039	2080.9	678	280.0	1299	536.4	1266
251.2	5019	251.0	2344	117.2	7699	385.0	492	24.6	1008	50.4	2013
251.2	5019	251.0	2344	117.2	7699	385.0	492	24.6	1008	50.4	2013
1444.5	3491	1441.6	1950	805.3	5039	2080.9	678	280.0	1299	536.4	1266
207.7	4497	224.9	1802	90.1	6848	342.4	344	17.2	589	29.5	1560
734.9	3959	758.9	1718	329.3	6075	1164.5	399	76.5	937	179.6	1477
734.9	3959	758.9	1718	329.3	6075	1164.5	399	76.5	937	179.6	1477
734.9	3959	758.9	1718	329.3	6075	1164.5	399	76.5	937	179.6	1477
734.9	3959	758.9	1718	329.3	6075	1164.5	399	76.5	937	179.6	1477
734.9	3959	758.9	1718	329.3	6075	1164.5	399	76.5	937	179.6	1477
734.9	3959	758.9	1718	329.3	6075	1164.5	399	76.5	937	179.6	1477
734.9	3959	758.9	1718	329.3	6075	1164.5	399	76.5	937	179.6	1477
734.9	3959	758.9	1718	329.3	6075	1164.5	399	76.5	937	179.6	1477
734.9	3959	758.9	1718	329.3	6075	1164.5	399	76.5	937	179.6	1477
734.9	3959	758.9	1718	329.3	6075	1164.5	399	76.5	937	179.6	1477
734.9	3959	758.9	1718	329.3	6075	1164.5	399	76.5	937	179.6	1477
734.9	3959	758.9	1718	329.3	6075	1164.5	399	76.5	937	179.6	1477

734.9	3959	758.9	1718	329.3	6075	1164.5	399	76.5	937	179.6	1477
734.9	3959	758.9	1718	329.3	6075	1164.5	399	76.5	937	179.6	1477
734.9	3959	758.9	1718	329.3	6075	1164.5	399	76.5	937	179.6	1477
734.9	3959	758.9	1718	329.3	6075	1164.5	399	76.5	937	179.6	1477
1391.9	2791	1586.2	1236	702.5	4004	2275.6	398	226.2	877	498.4	980
1391.9	2791	1586.2	1236	702.5	4004	2275.6	398	226.2	877	498.4	980
163.5	3281	164.1	1340	67.0	5210	260.5	347	17.4	625	31.3	1279
163.5	3281	164.1	1340	67.0	5210	260.5	347	17.4	625	31.3	1279
163.5	3281	164.1	1340	67.0	5210	260.5	347	17.4	625	31.3	1279
163.5	3281	164.1	1340	67.0	5210	260.5	347	17.4	625	31.3	1279
163.5	3281	164.1	1340	67.0	5210	260.5	347	17.4	625	31.3	1279
163.5	3281	164.1	1340	67.0	5210	260.5	347	17.4	625	31.3	1279
163.5	3281	164.1	1340	67.0	5210	260.5	347	17.4	625	31.3	1279
737.9	1348	650.6	287	138.5	2590	1250.0	975	470.6	359	173.3	342
651.9	3726	528.9	58	8.2	8261	1172.6	2700	383.2	134	19.0	55
651.9	3726	528.9	58	8.2	8261	1172.6	2700	383.2	134	19.0	55
238.4	2269	266.3	601	70.5	3700	434.2	140	16.4	313	36.7	685
630.1	1559	687.9	535	236.1	2452	1082.0	159	70.2	259	114.3	485
630.1	1559	687.9	535	236.1	2452	1082.0	159	70.2	259	114.3	485
1984.1	1048	2007.1	524	1003.5	1560	2987.7	160	306.4	270	517.1	405

724.6	2865	830.1	1116	323.4	4250	1231.4	320	92.7	553	160.2	852
724.6	2865	830.1	1116	323.4	4250	1231.4	320	92.7	553	160.2	852
3668.3	1913	3580.3	1156	2163.5	2717	5085.0	364	681.2	727	1360.6	697
703.3	3330	711.7	1944	415.5	4677	999.5	450	96.2	954	203.9	1309
703.3	3330	711.7	1944	415.5	4677	999.5	450	96.2	954	203.9	1309
703.3	3330	711.7	1944	415.5	4677	999.5	450	96.2	954	203.9	1309
129.4	2550	127.5	1098	54.9	4039	202.0	205	10.3	413	20.7	906
170.6	1859	179.7	917	88.6	2707	261.7	257	24.8	322	31.1	741
712.9	1369	713.4	332	173.0	2405	1253.2	356	185.5	424	220.9	442
2968.7	1734	2770.5	265	423.4	3327	5315.8	1213	1938.1	809	1292.6	488
2971.4	2487	2799.2	629	708.0	4498	5062.6	1196	1346.1	1137	1279.7	806
2968.7	1734	2770.5	265	423.4	3327	5315.8	1213	1938.1	809	1292.6	488
2968.7	1734	2770.5	265	423.4	3327	5315.8	1213	1938.1	809	1292.6	488
712.9	1369	713.4	332	173.0	2405	1253.2	356	185.5	424	220.9	442
1579.4	930	1721.9	264	488.8	1519	2812.5	220	407.3	209	387.0	311
129.4	2550	127.5	1098	54.9	4039	202.0	205	10.3	413	20.7	906
703.3	3330	711.7	1944	415.5	4677	999.5	450	96.2	954	203.9	1309
703.3	3330	711.7	1944	415.5	4677	999.5	450	96.2	954	203.9	1309
703.3	3330	711.7	1944	415.5	4677	999.5	450	96.2	954	203.9	1309
47.2	418	20.9	264	13.2	1098	54.9	196	9.8	217	10.9	220

34.7	1	1.9	0	0.0	6446	34.7	526	34.7	1512	34.7	2780
917.3	1985	983.7	507	251.2	3329	1649.7	216	107.0	397	196.7	631
2461.0	2369	2556.0	939	1013.1	3711	4003.9	279	301.0	580	625.8	892
2461.0	2369	2556.0	939	1013.1	3711	4003.9	279	301.0	580	625.8	892
1136.6	1728	1116.6	689	445.2	2798	1807.9	282	182.2	434	280.4	645
1136.6	1728	1116.6	689	445.2	2798	1807.9	282	182.2	434	280.4	645
1136.6	1728	1116.6	689	445.2	2798	1807.9	282	182.2	434	280.4	645
283.2	3017	312.6	857	88.8	4894	507.0	235	24.3	470	48.7	870
283.2	3017	312.6	857	88.8	4894	507.0	235	24.3	470	48.7	870
283.2	3017	312.6	857	88.8	4894	507.0	235	24.3	470	48.7	870
2461.0	2369	2556.0	939	1013.1	3711	4003.9	279	301.0	580	625.8	892
2461.0	2369	2556.0	939	1013.1	3711	4003.9	279	301.0	580	625.8	892
2461.0	2369	2556.0	939	1013.1	3711	4003.9	279	301.0	580	625.8	892
2461.0	2369	2556.0	939	1013.1	3711	4003.9	279	301.0	580	625.8	892
2461.0	2369	2556.0	939	1013.1	3711	4003.9	279	301.0	580	625.8	892
917.3	1985	983.7	507	251.2	3329	1649.7	216	107.0	397	196.7	631
47.2	418	20.9	264	13.2	1098	54.9	196	9.8	217	10.9	220
64.8	1243	62.2	450	22.5	2089	104.5	125	6.3	255	12.8	480
307.6	1351	334.9	337	83.5	2255	559.0	125	31.0	235	58.3	430
307.6	1351	334.9	337	83.5	2255	559.0	125	31.0	235	58.3	430

307.6	1351	334.9	337	83.5	2255	559.0	125	31.0	235	58.3	430
307.6	1351	334.9	337	83.5	2255	559.0	125	31.0	235	58.3	430
273.1	1972	296.5	476	71.6	3312	498.0	120	18.0	224	33.7	471
273.1	1972	296.5	476	71.6	3312	498.0	120	18.0	224	33.7	471
273.1	1972	296.5	476	71.6	3312	498.0	120	18.0	224	33.7	471
202.3	1195	229.3	383	73.5	1866	358.1	76	14.6	193	37.0	275
202.3	1195	229.3	383	73.5	1866	358.1	76	14.6	193	37.0	275
202.3	1195	229.3	383	73.5	1866	358.1	76	14.6	193	37.0	275
202.3	1195	229.3	383	73.5	1866	358.1	76	14.6	193	37.0	275
202.3	1195	229.3	383	73.5	1866	358.1	76	14.6	193	37.0	275
202.3	1195	229.3	383	73.5	1866	358.1	76	14.6	193	37.0	275
202.3	1195	229.3	383	73.5	1866	358.1	76	14.6	193	37.0	275
202.3	1195	229.3	383	73.5	1866	358.1	76	14.6	193	37.0	275
202.3	1195	229.3	383	73.5	1866	358.1	76	14.6	193	37.0	275
64.8	1243	62.2	450	22.5	2089	104.5	125	6.3	255	12.8	480
64.8	1243	62.2	450	22.5	2089	104.5	125	6.3	255	12.8	480
202.3	1195	229.3	383	73.5	1866	358.1	76	14.6	193	37.0	275
202.3	1195	229.3	383	73.5	1866	358.1	76	14.6	193	37.0	275
202.3	1195	229.3	383	73.5	1866	358.1	76	14.6	193	37.0	275
202.3	1195	229.3	383	73.5	1866	358.1	76	14.6	193	37.0	275

202.3	1195	229.3	383	73.5	1866	358.1	76	14.6	193	37.0	275
202.3	1195	229.3	383	73.5	1866	358.1	76	14.6	193	37.0	275
202.3	1195	229.3	383	73.5	1866	358.1	76	14.6	193	37.0	275
202.3	1195	229.3	383	73.5	1866	358.1	76	14.6	193	37.0	275
202.3	1195	229.3	383	73.5	1866	358.1	76	14.6	193	37.0	275
273.1	1972	296.5	476	71.6	3312	498.0	120	18.0	224	33.7	471
273.1	1972	296.5	476	71.6	3312	498.0	120	18.0	224	33.7	471
273.1	1972	296.5	476	71.6	3312	498.0	120	18.0	224	33.7	471
307.6	1351	334.9	337	83.5	2255	559.0	125	31.0	235	58.3	430
307.6	1351	334.9	337	83.5	2255	559.0	125	31.0	235	58.3	430
307.6	1351	334.9	337	83.5	2255	559.0	125	31.0	235	58.3	430
307.6	1351	334.9	337	83.5	2255	559.0	125	31.0	235	58.3	430
831.6	2700	850.8	883	278.3	4456	1404.2	329	103.7	642	202.3	948

2010 Cenus Interactive Population M

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Res 35 to 49 Density	Res 50 to 64	Res 50 to 64 Density	Res >65	Res >65 Density	Occupied Units	Occ Unit Density	Owner Occupied Units	Own Occ Unit Density	Owner Occupied Pop
779.7	461	736.6	268	428.2	1898	3032.6	265	423.4	536
45.7	276	66.7	397	96.0	588	142.1	239	57.8	472
7.8	29	4.1	16	2.3	868	123.2	41	5.8	109
7.8	29	4.1	16	2.3	868	123.2	41	5.8	109
7.8	29	4.1	16	2.3	868	123.2	41	5.8	109
133.6	926	160.9	1058	183.8	3007	522.4	1187	206.2	2784
531.9	1015	529.8	373	194.7	1964	1025.2	985	514.1	2499
78.0	2430	121.5	1724	86.2	3351	167.6	2844	142.2	7314
78.0	2430	121.5	1724	86.2	3351	167.6	2844	142.2	7314
522.8	1060	437.7	549	226.7	2587	1068.3	658	271.7	1553
83.2	1398	83.9	1356	81.4	2651	159.1	2128	127.7	5364
165.2	456	220.2	348	168.1	1306	630.8	487	235.2	1115
64.0	1853	92.7	961	48.1	1838	91.9	1838	91.9	4720
64.0	1853	92.7	961	48.1	1838	91.9	1838	91.9	4720
64.0	1853	92.7	961	48.1	1838	91.9	1838	91.9	4720
64.0	1853	92.7	961	48.1	1838	91.9	1838	91.9	4720

64.0	1853	92.7	961	48.1	1838	91.9	1838	91.9	4720
64.0	1853	92.7	961	48.1	1838	91.9	1838	91.9	4720
64.0	1853	92.7	961	48.1	1838	91.9	1838	91.9	4720
556.4	951	540.0	673	382.1	2195	1246.3	1007	571.8	2378
556.4	951	540.0	673	382.1	2195	1246.3	1007	571.8	2378
556.4	951	540.0	673	382.1	2195	1246.3	1007	571.8	2378
556.4	951	540.0	673	382.1	2195	1246.3	1007	571.8	2378
557.0	951	540.5	673	382.5	2195	1247.5	1007	572.3	2378
557.0	951	540.5	673	382.5	2195	1247.5	1007	572.3	2378
557.0	951	540.5	673	382.5	2195	1247.5	1007	572.3	2378
531.9	1015	529.8	373	194.7	1964	1025.2	985	514.1	2499
531.9	1015	529.8	373	194.7	1964	1025.2	985	514.1	2499
317.3	1185	364.3	543	166.9	1839	565.4	1318	405.2	3467
317.3	1185	364.3	543	166.9	1839	565.4	1318	405.2	3467
317.3	1185	364.3	543	166.9	1839	565.4	1318	405.2	3467
317.3	1185	364.3	543	166.9	1839	565.4	1318	405.2	3467
317.3	1185	364.3	543	166.9	1839	565.4	1318	405.2	3467
317.3	1185	364.3	543	166.9	1839	565.4	1318	405.2	3467
317.3	1185	364.3	543	166.9	1839	565.4	1318	405.2	3467
317.3	1185	364.3	543	166.9	1839	565.4	1318	405.2	3467

317.3	1185	364.3	543	166.9	1839	565.4	1318	405.2	3467
78.0	2430	121.5	1724	86.2	3351	167.6	2844	142.2	7314
522.8	1060	437.7	549	226.7	2587	1068.3	658	271.7	1553
522.8	1060	437.7	549	226.7	2587	1068.3	658	271.7	1553
522.8	1060	437.7	549	226.7	2587	1068.3	658	271.7	1553
100.7	2579	129.0	1334	66.7	3585	179.3	2671	133.6	7338
100.7	2579	129.0	1334	66.7	3585	179.3	2671	133.6	7338
522.8	1060	437.7	549	226.7	2587	1068.3	658	271.7	1553
78.0	2430	121.5	1724	86.2	3351	167.6	2844	142.2	7314
283.1	1950	373.8	1148	220.1	2967	568.7	1979	379.4	5265
283.1	1950	373.8	1148	220.1	2967	568.7	1979	379.4	5265
283.1	1950	373.8	1148	220.1	2967	568.7	1979	379.4	5265
283.1	1950	373.8	1148	220.1	2967	568.7	1979	379.4	5265
283.1	1950	373.8	1148	220.1	2967	568.7	1979	379.4	5265
283.1	1950	373.8	1148	220.1	2967	568.7	1979	379.4	5265
283.1	1950	373.8	1148	220.1	2967	568.7	1979	379.4	5265
283.1	1950	373.8	1148	220.1	2967	568.7	1979	379.4	5265
283.1	1950	373.8	1148	220.1	2967	568.7	1979	379.4	5265
283.1	1950	373.8	1148	220.1	2967	568.7	1979	379.4	5265
283.1	1950	373.8	1148	220.1	2967	568.7	1979	379.4	5265
283.1	1950	373.8	1148	220.1	2967	568.7	1979	379.4	5265

283.1	1950	373.8	1148	220.1	2967	568.7	1979	379.4	5265
283.1	1950	373.8	1148	220.1	2967	568.7	1979	379.4	5265
283.1	1950	373.8	1148	220.1	2967	568.7	1979	379.4	5265
283.1	1950	373.8	1148	220.1	2967	568.7	1979	379.4	5265
557.0	951	540.5	673	382.5	2195	1247.5	1007	572.3	2378
557.0	951	540.5	673	382.5	2195	1247.5	1007	572.3	2378
64.0	1853	92.7	961	48.1	1838	91.9	1838	91.9	4720
64.0	1853	92.7	961	48.1	1838	91.9	1838	91.9	4720
64.0	1853	92.7	961	48.1	1838	91.9	1838	91.9	4720
64.0	1853	92.7	961	48.1	1838	91.9	1838	91.9	4720
64.0	1853	92.7	961	48.1	1838	91.9	1838	91.9	4720
64.0	1853	92.7	961	48.1	1838	91.9	1838	91.9	4720
64.0	1853	92.7	961	48.1	1838	91.9	1838	91.9	4720
165.1	456	220.1	348	168.0	1306	630.3	487	235.0	1115
7.8	29	4.1	16	2.3	868	123.2	41	5.8	109
7.8	29	4.1	16	2.3	868	123.2	41	5.8	109
80.4	1153	135.3	1344	157.7	2060	241.7	1546	181.4	3110
214.0	663	292.6	829	365.8	1302	574.5	966	426.3	2157
214.0	663	292.6	829	365.8	1302	574.5	966	426.3	2157
775.6	384	735.4	275	526.7	739	1415.3	433	829.3	1179

246.9	1055	305.7	1345	389.7	2033	589.0	1434	415.5	3721
246.9	1055	305.7	1345	389.7	2033	589.0	1434	415.5	3721
1304.5	497	930.2	304	569.0	1211	2266.5	403	754.2	1045
279.8	1173	250.7	582	124.4	1959	418.7	1354	289.4	4513
279.8	1173	250.7	582	124.4	1959	418.7	1354	289.4	4513
279.8	1173	250.7	582	124.4	1959	418.7	1354	289.4	4513
45.3	1493	74.7	911	45.6	1967	98.4	1382	69.1	3725
71.6	896	86.6	382	36.9	1384	133.8	1012	97.8	2653
230.3	548	285.6	580	302.2	1329	692.5	648	337.7	1179
779.7	461	736.6	268	428.2	1898	3032.6	265	423.4	536
907.2	779	876.8	473	532.4	2439	2745.2	688	774.4	1472
779.7	461	736.6	268	428.2	1898	3032.6	265	423.4	536
779.7	461	736.6	268	428.2	1898	3032.6	265	423.4	536
230.3	548	285.6	580	302.2	1329	692.5	648	337.7	1179
575.8	455	842.4	276	511.0	781	1446.0	551	1020.2	1151
45.3	1493	74.7	911	45.6	1967	98.4	1382	69.1	3725
279.8	1173	250.7	582	124.4	1959	418.7	1354	289.4	4513
279.8	1173	250.7	582	124.4	1959	418.7	1354	289.4	4513
279.8	1173	250.7	582	124.4	1959	418.7	1354	289.4	4513
11.0	243	12.2	111	5.6	235	11.8	155	7.8	382

34.7	1391	34.7	188	34.7	6	11.6	0	0.0	0
312.7	1036	513.4	969	480.2	1898	940.5	1005	498.0	1995
962.4	1205	1300.1	633	683.0	1864	2011.1	1175	1267.7	2854
962.4	1205	1300.1	633	683.0	1864	2011.1	1175	1267.7	2854
416.8	876	566.0	455	294.0	1348	871.0	721	465.9	1923
416.8	876	566.0	455	294.0	1348	871.0	721	465.9	1923
416.8	876	566.0	455	294.0	1348	871.0	721	465.9	1923
90.1	1684	174.5	1538	159.3	2610	270.4	2050	212.4	4334
90.1	1684	174.5	1538	159.3	2610	270.4	2050	212.4	4334
90.1	1684	174.5	1538	159.3	2610	270.4	2050	212.4	4334
962.4	1205	1300.1	633	683.0	1864	2011.1	1175	1267.7	2854
962.4	1205	1300.1	633	683.0	1864	2011.1	1175	1267.7	2854
962.4	1205	1300.1	633	683.0	1864	2011.1	1175	1267.7	2854
962.4	1205	1300.1	633	683.0	1864	2011.1	1175	1267.7	2854
962.4	1205	1300.1	633	683.0	1864	2011.1	1175	1267.7	2854
312.7	1036	513.4	969	480.2	1898	940.5	1005	498.0	1995
11.0	243	12.2	111	5.6	235	11.8	155	7.8	382
24.0	737	36.9	442	22.1	1042	52.1	579	29.0	1330
106.6	769	190.6	562	139.3	1314	325.7	781	193.6	1555
106.6	769	190.6	562	139.3	1314	325.7	781	193.6	1555

106.6	769	190.6	562	139.3	1314	325.7	781	193.6	1555
106.6	769	190.6	562	139.3	1314	325.7	781	193.6	1555
70.8	1192	179.2	1258	189.2	1784	268.3	1306	196.4	2625
70.8	1192	179.2	1258	189.2	1784	268.3	1306	196.4	2625
70.8	1192	179.2	1258	189.2	1784	268.3	1306	196.4	2625
52.8	626	120.1	656	125.9	980	188.1	681	130.7	1410
52.8	626	120.1	656	125.9	980	188.1	681	130.7	1410
52.8	626	120.1	656	125.9	980	188.1	681	130.7	1410
52.8	626	120.1	656	125.9	980	188.1	681	130.7	1410
52.8	626	120.1	656	125.9	980	188.1	681	130.7	1410
52.8	626	120.1	656	125.9	980	188.1	681	130.7	1410
52.8	626	120.1	656	125.9	980	188.1	681	130.7	1410
52.8	626	120.1	656	125.9	980	188.1	681	130.7	1410
52.8	626	120.1	656	125.9	980	188.1	681	130.7	1410
52.8	626	120.1	656	125.9	980	188.1	681	130.7	1410
24.0	737	36.9	442	22.1	1042	52.1	579	29.0	1330
24.0	737	36.9	442	22.1	1042	52.1	579	29.0	1330
52.8	626	120.1	656	125.9	980	188.1	681	130.7	1410
52.8	626	120.1	656	125.9	980	188.1	681	130.7	1410
52.8	626	120.1	656	125.9	980	188.1	681	130.7	1410
52.8	626	120.1	656	125.9	980	188.1	681	130.7	1410

52.8	626	120.1	656	125.9	980	188.1	681	130.7	1410
52.8	626	120.1	656	125.9	980	188.1	681	130.7	1410
52.8	626	120.1	656	125.9	980	188.1	681	130.7	1410
52.8	626	120.1	656	125.9	980	188.1	681	130.7	1410
52.8	626	120.1	656	125.9	980	188.1	681	130.7	1410
70.8	1192	179.2	1258	189.2	1784	268.3	1306	196.4	2625
70.8	1192	179.2	1258	189.2	1784	268.3	1306	196.4	2625
70.8	1192	179.2	1258	189.2	1784	268.3	1306	196.4	2625
106.6	769	190.6	562	139.3	1314	325.7	781	193.6	1555
106.6	769	190.6	562	139.3	1314	325.7	781	193.6	1555
106.6	769	190.6	562	139.3	1314	325.7	781	193.6	1555
106.6	769	190.6	562	139.3	1314	325.7	781	193.6	1555
298.7	1275	401.8	1137	358.3	2466	777.1	1419	447.2	2920

Map (residence-based data)

esidential Owners and Renters

Own Occ Pop Density	Renter Occupied Units	Rent Occ Unit Density	Renter Occupied Pop	Rent Occ Pop Density	Housing with Minors	Housing with Minors Density	Res Latino	Res Latino Density
856.4	1633	2609.2	2962	4732.6	162	258.8	557	890.0
114.1	349	84.4	676	163.4	91	22.0	170	41.1
15.5	827	117.4	1510	214.3	30	4.3	970	137.7
15.5	827	117.4	1510	214.3	30	4.3	970	137.7
15.5	827	117.4	1510	214.3	30	4.3	970	137.7
483.7	1820	316.2	4457	774.4	403	70.0	748	130.0
1304.4	979	511.0	2454	1280.9	708	369.6	929	484.9
365.7	507	25.4	1238	61.9	1024	51.2	849	42.5
365.7	507	25.4	1238	61.9	1024	51.2	849	42.5
641.3	1929	796.6	5334	2202.7	1024	422.9	3625	1496.9
322.0	523	31.4	1584	95.1	905	54.3	1315	78.9
538.5	819	395.6	1757	848.6	171	82.6	227	109.6
236.0	688	34.4	1762	88.1	731	36.6	864	43.2
236.0	688	34.4	1762	88.1	731	36.6	864	43.2
236.0	688	34.4	1762	88.1	731	36.6	864	43.2
236.0	688	34.4	1762	88.1	731	36.6	864	43.2

236.0	688	34.4	1762	88.1	731	36.6	864	43.2
236.0	688	34.4	1762	88.1	731	36.6	864	43.2
236.0	688	34.4	1762	88.1	731	36.6	864	43.2
1350.2	1188	674.5	2783	1580.2	719	408.2	1092	620.0
1350.2	1188	674.5	2783	1580.2	719	408.2	1092	620.0
1350.2	1188	674.5	2783	1580.2	719	408.2	1092	620.0
1350.2	1188	674.5	2783	1580.2	719	408.2	1092	620.0
1351.5	1188	675.2	2783	1581.7	719	408.6	1092	620.6
1351.5	1188	675.2	2783	1581.7	719	408.6	1092	620.6
1351.5	1188	675.2	2783	1581.7	719	408.6	1092	620.6
1304.4	979	511.0	2454	1280.9	708	369.6	929	484.9
1304.4	979	511.0	2454	1280.9	708	369.6	929	484.9
1065.9	521	160.2	1341	412.3	629	193.4	714	219.5
1065.9	521	160.2	1341	412.3	629	193.4	714	219.5
1065.9	521	160.2	1341	412.3	629	193.4	714	219.5
1065.9	521	160.2	1341	412.3	629	193.4	714	219.5
1065.9	521	160.2	1341	412.3	629	193.4	714	219.5
1065.9	521	160.2	1341	412.3	629	193.4	714	219.5
1065.9	521	160.2	1341	412.3	629	193.4	714	219.5
1065.9	521	160.2	1341	412.3	629	193.4	714	219.5

1065.9	521	160.2	1341	412.3	629	193.4	714	219.5
365.7	507	25.4	1238	61.9	1024	51.2	849	42.5
641.3	1929	796.6	5334	2202.7	1024	422.9	3625	1496.9
641.3	1929	796.6	5334	2202.7	1024	422.9	3625	1496.9
641.3	1929	796.6	5334	2202.7	1024	422.9	3625	1496.9
366.9	914	45.7	2694	134.7	1220	61.0	2194	109.7
366.9	914	45.7	2694	134.7	1220	61.0	2194	109.7
641.3	1929	796.6	5334	2202.7	1024	422.9	3625	1496.9
365.7	507	25.4	1238	61.9	1024	51.2	849	42.5
1009.3	988	189.4	2420	463.9	941	180.4	1090	208.9
1009.3	988	189.4	2420	463.9	941	180.4	1090	208.9
1009.3	988	189.4	2420	463.9	941	180.4	1090	208.9
1009.3	988	189.4	2420	463.9	941	180.4	1090	208.9
1009.3	988	189.4	2420	463.9	941	180.4	1090	208.9
1009.3	988	189.4	2420	463.9	941	180.4	1090	208.9
1009.3	988	189.4	2420	463.9	941	180.4	1090	208.9
1009.3	988	189.4	2420	463.9	941	180.4	1090	208.9
1009.3	988	189.4	2420	463.9	941	180.4	1090	208.9
1009.3	988	189.4	2420	463.9	941	180.4	1090	208.9
1009.3	988	189.4	2420	463.9	941	180.4	1090	208.9
1009.3	988	189.4	2420	463.9	941	180.4	1090	208.9

1009.3	988	189.4	2420	463.9	941	180.4	1090	208.9
1009.3	988	189.4	2420	463.9	941	180.4	1090	208.9
1009.3	988	189.4	2420	463.9	941	180.4	1090	208.9
1009.3	988	189.4	2420	463.9	941	180.4	1090	208.9
1351.5	1188	675.2	2783	1581.7	719	408.6	1092	620.6
1351.5	1188	675.2	2783	1581.7	719	408.6	1092	620.6
236.0	688	34.4	1762	88.1	731	36.6	864	43.2
236.0	688	34.4	1762	88.1	731	36.6	864	43.2
236.0	688	34.4	1762	88.1	731	36.6	864	43.2
236.0	688	34.4	1762	88.1	731	36.6	864	43.2
236.0	688	34.4	1762	88.1	731	36.6	864	43.2
236.0	688	34.4	1762	88.1	731	36.6	864	43.2
236.0	688	34.4	1762	88.1	731	36.6	864	43.2
538.1	819	395.3	1757	848.0	171	82.5	227	109.6
15.5	827	117.4	1510	214.3	30	4.3	970	137.7
15.5	827	117.4	1510	214.3	30	4.3	970	137.7
364.9	514	60.3	1182	138.7	354	41.5	367	43.1
951.8	336	148.3	824	363.6	303	133.7	413	182.2
951.8	336	148.3	824	363.6	303	133.7	413	182.2
2258.0	306	586.0	905	1733.2	248	475.0	1088	2083.7

1078.1	599	173.6	1550	449.1	546	158.2	2343	678.9
1078.1	599	173.6	1550	449.1	546	158.2	2343	678.9
1955.8	808	1512.2	2725	5100.0	510	954.5	2417	4523.6
964.5	605	129.3	2105	449.9	944	201.7	3356	717.2
964.5	605	129.3	2105	449.9	944	201.7	3356	717.2
964.5	605	129.3	2105	449.9	944	201.7	3356	717.2
186.3	585	29.3	1412	70.6	564	28.2	570	28.5
256.5	372	36.0	964	93.2	508	49.1	323	31.2
614.4	681	354.9	1548	806.7	203	105.8	682	355.4
856.4	1633	2609.2	2962	4732.6	162	258.8	557	890.0
1656.8	1751	1970.8	3523	3965.2	363	408.6	806	907.2
856.4	1633	2609.2	2962	4732.6	162	258.8	557	890.0
856.4	1633	2609.2	2962	4732.6	162	258.8	557	890.0
614.4	681	354.9	1548	806.7	203	105.8	682	355.4
2131.1	230	425.9	540	999.8	157	290.7	306	566.6
186.3	585	29.3	1412	70.6	564	28.2	570	28.5
964.5	605	129.3	2105	449.9	944	201.7	3356	717.2
964.5	605	129.3	2105	449.9	944	201.7	3356	717.2
964.5	605	129.3	2105	449.9	944	201.7	3356	717.2
19.1	80	4.0	171	8.6	54	2.7	349	17.5

0.0	6	11.6	18	34.7	0	0.0	1881	34.7
988.6	893	442.5	1820	901.9	319	158.1	537	266.1
3079.2	689	743.4	1772	1911.8	564	608.5	666	718.6
3079.2	689	743.4	1772	1911.8	564	608.5	666	718.6
1242.5	627	405.1	1547	999.6	406	262.3	690	445.8
1242.5	627	405.1	1547	999.6	406	262.3	690	445.8
1242.5	627	405.1	1547	999.6	406	262.3	690	445.8
449.0	560	58.0	1373	142.2	526	54.5	558	57.8
449.0	560	58.0	1373	142.2	526	54.5	558	57.8
449.0	560	58.0	1373	142.2	526	54.5	558	57.8
3079.2	689	743.4	1772	1911.8	564	608.5	666	718.6
3079.2	689	743.4	1772	1911.8	564	608.5	666	718.6
3079.2	689	743.4	1772	1911.8	564	608.5	666	718.6
3079.2	689	743.4	1772	1911.8	564	608.5	666	718.6
3079.2	689	743.4	1772	1911.8	564	608.5	666	718.6
988.6	893	442.5	1820	901.9	319	158.1	537	266.1
19.1	80	4.0	171	8.6	54	2.7	349	17.5
66.5	463	23.2	1192	59.6	252	12.6	545	27.3
385.5	533	132.1	1037	257.1	214	53.1	207	51.3
385.5	533	132.1	1037	257.1	214	53.1	207	51.3

385.5	533	132.1	1037	257.1	214	53.1	207	51.3
385.5	533	132.1	1037	257.1	214	53.1	207	51.3
394.7	478	71.9	1163	174.9	255	38.3	552	83.0
394.7	478	71.9	1163	174.9	255	38.3	552	83.0
394.7	478	71.9	1163	174.9	255	38.3	552	83.0
270.6	299	57.4	838	160.8	188	36.1	638	122.4
270.6	299	57.4	838	160.8	188	36.1	638	122.4
270.6	299	57.4	838	160.8	188	36.1	638	122.4
270.6	299	57.4	838	160.8	188	36.1	638	122.4
270.6	299	57.4	838	160.8	188	36.1	638	122.4
270.6	299	57.4	838	160.8	188	36.1	638	122.4
270.6	299	57.4	838	160.8	188	36.1	638	122.4
270.6	299	57.4	838	160.8	188	36.1	638	122.4
270.6	299	57.4	838	160.8	188	36.1	638	122.4
66.5	463	23.2	1192	59.6	252	12.6	545	27.3
66.5	463	23.2	1192	59.6	252	12.6	545	27.3
270.6	299	57.4	838	160.8	188	36.1	638	122.4
270.6	299	57.4	838	160.8	188	36.1	638	122.4
270.6	299	57.4	838	160.8	188	36.1	638	122.4
270.6	299	57.4	838	160.8	188	36.1	638	122.4

270.6	299	57.4	838	160.8	188	36.1	638	122.4
270.6	299	57.4	838	160.8	188	36.1	638	122.4
270.6	299	57.4	838	160.8	188	36.1	638	122.4
270.6	299	57.4	838	160.8	188	36.1	638	122.4
270.6	299	57.4	838	160.8	188	36.1	638	122.4
394.7	478	71.9	1163	174.9	255	38.3	552	83.0
394.7	478	71.9	1163	174.9	255	38.3	552	83.0
394.7	478	71.9	1163	174.9	255	38.3	552	83.0
385.5	533	132.1	1037	257.1	214	53.1	207	51.3
385.5	533	132.1	1037	257.1	214	53.1	207	51.3
385.5	533	132.1	1037	257.1	214	53.1	207	51.3
385.5	533	132.1	1037	257.1	214	53.1	207	51.3
920.2	1047	329.9	2418	762.0	525	165.4	837	263.8

Tract-lev

Resident Race/Ethnicity

Res White	Res White Density	Res Black	Res Black Density	Res Asian	Res Asian Density	Res AIAN	Res AIAN Density	Res NHPI	Res NHPI Density	Res Other Race
3067	4900.4	59	94.3	130	207.7	26	41.5	6	9.6	150
1122	271.2	5	1.2	50	12.1	18	4.4	2	0.5	58
6487	920.8	86	12.2	967	137.3	23	3.3	11	1.6	234
6487	920.8	86	12.2	967	137.3	23	3.3	11	1.6	234
6487	920.8	86	12.2	967	137.3	23	3.3	11	1.6	234
6393	1110.7	60	10.4	362	62.9	39	6.8	15	2.6	191
4233	2209.5	52	27.1	101	52.7	68	35.5	4	2.1	297
8028	401.4	45	2.3	123	6.2	73	3.7	7	0.4	159
8028	401.4	45	2.3	123	6.2	73	3.7	7	0.4	159
5010	2068.9	209	86.3	93	38.4	100	41.3	19	7.8	1267
6007	360.5	122	7.3	150	9.0	47	2.8	6	0.4	363
2538	1225.8	18	8.7	133	64.2	7	3.4	1	0.5	82
5754	287.7	36	1.8	112	5.6	83	4.2	5	0.3	326
5754	287.7	36	1.8	112	5.6	83	4.2	5	0.3	326
5754	287.7	36	1.8	112	5.6	83	4.2	5	0.3	326
5754	287.7	36	1.8	112	5.6	83	4.2	5	0.3	326

5754	287.7	36	1.8	112	5.6	83	4.2	5	0.3	326
5754	287.7	36	1.8	112	5.6	83	4.2	5	0.3	326
5754	287.7	36	1.8	112	5.6	83	4.2	5	0.3	326
4283	2431.8	108	61.3	217	123.2	45	25.6	11	6.2	360
4283	2431.8	108	61.3	217	123.2	45	25.6	11	6.2	360
4283	2431.8	108	61.3	217	123.2	45	25.6	11	6.2	360
4283	2431.8	108	61.3	217	123.2	45	25.6	11	6.2	360
4283	2434.2	108	61.4	217	123.3	45	25.6	11	6.3	360
4283	2434.2	108	61.4	217	123.3	45	25.6	11	6.3	360
4283	2434.2	108	61.4	217	123.3	45	25.6	11	6.3	360
4233	2209.5	52	27.1	101	52.7	68	35.5	4	2.1	297
4233	2209.5	52	27.1	101	52.7	68	35.5	4	2.1	297
4303	1323.0	39	12.0	108	33.2	54	16.6	6	1.8	173
4303	1323.0	39	12.0	108	33.2	54	16.6	6	1.8	173
4303	1323.0	39	12.0	108	33.2	54	16.6	6	1.8	173
4303	1323.0	39	12.0	108	33.2	54	16.6	6	1.8	173
4303	1323.0	39	12.0	108	33.2	54	16.6	6	1.8	173
4303	1323.0	39	12.0	108	33.2	54	16.6	6	1.8	173
4303	1323.0	39	12.0	108	33.2	54	16.6	6	1.8	173
4303	1323.0	39	12.0	108	33.2	54	16.6	6	1.8	173

4303	1323.0	39	12.0	108	33.2	54	16.6	6	1.8	173
8028	401.4	45	2.3	123	6.2	73	3.7	7	0.4	159
5010	2068.9	209	86.3	93	38.4	100	41.3	19	7.8	1267
5010	2068.9	209	86.3	93	38.4	100	41.3	19	7.8	1267
5010	2068.9	209	86.3	93	38.4	100	41.3	19	7.8	1267
8489	424.5	94	4.7	79	4.0	101	5.1	7	0.4	923
8489	424.5	94	4.7	79	4.0	101	5.1	7	0.4	923
5010	2068.9	209	86.3	93	38.4	100	41.3	19	7.8	1267
8028	401.4	45	2.3	123	6.2	73	3.7	7	0.4	159
6924	1327.3	78	15.0	132	25.3	82	15.7	28	5.4	298
6924	1327.3	78	15.0	132	25.3	82	15.7	28	5.4	298
6924	1327.3	78	15.0	132	25.3	82	15.7	28	5.4	298
6924	1327.3	78	15.0	132	25.3	82	15.7	28	5.4	298
6924	1327.3	78	15.0	132	25.3	82	15.7	28	5.4	298
6924	1327.3	78	15.0	132	25.3	82	15.7	28	5.4	298
6924	1327.3	78	15.0	132	25.3	82	15.7	28	5.4	298
6924	1327.3	78	15.0	132	25.3	82	15.7	28	5.4	298
6924	1327.3	78	15.0	132	25.3	82	15.7	28	5.4	298
6924	1327.3	78	15.0	132	25.3	82	15.7	28	5.4	298
6924	1327.3	78	15.0	132	25.3	82	15.7	28	5.4	298
6924	1327.3	78	15.0	132	25.3	82	15.7	28	5.4	298
6924	1327.3	78	15.0	132	25.3	82	15.7	28	5.4	298

6924	1327.3	78	15.0	132	25.3	82	15.7	28	5.4	298
6924	1327.3	78	15.0	132	25.3	82	15.7	28	5.4	298
6924	1327.3	78	15.0	132	25.3	82	15.7	28	5.4	298
6924	1327.3	78	15.0	132	25.3	82	15.7	28	5.4	298
4283	2434.2	108	61.4	217	123.3	45	25.6	11	6.3	360
4283	2434.2	108	61.4	217	123.3	45	25.6	11	6.3	360
5754	287.7	36	1.8	112	5.6	83	4.2	5	0.3	326
5754	287.7	36	1.8	112	5.6	83	4.2	5	0.3	326
5754	287.7	36	1.8	112	5.6	83	4.2	5	0.3	326
5754	287.7	36	1.8	112	5.6	83	4.2	5	0.3	326
5754	287.7	36	1.8	112	5.6	83	4.2	5	0.3	326
5754	287.7	36	1.8	112	5.6	83	4.2	5	0.3	326
5754	287.7	36	1.8	112	5.6	83	4.2	5	0.3	326
2538	1224.9	18	8.7	133	64.2	7	3.4	1	0.5	82
6487	920.8	86	12.2	967	137.3	23	3.3	11	1.6	234
6487	920.8	86	12.2	967	137.3	23	3.3	11	1.6	234
3907	458.5	20	2.3	151	17.7	23	2.7	7	0.8	81
2626	1158.7	28	12.4	112	49.4	20	8.8	2	0.9	49
2626	1158.7	28	12.4	112	49.4	20	8.8	2	0.9	49
1369	2621.9	19	36.4	80	153.2	21	40.2	2	3.8	487

3667	1062.5	60	17.4	321	93.0	63	18.3	17	4.9	1009
3667	1062.5	60	17.4	321	93.0	63	18.3	17	4.9	1009
2558	4787.4	106	198.4	65	121.7	75	140.4	8	15.0	805
4297	918.3	86	18.4	206	44.0	95	20.3	10	2.1	1618
4297	918.3	86	18.4	206	44.0	95	20.3	10	2.1	1618
4297	918.3	86	18.4	206	44.0	95	20.3	10	2.1	1618
4651	232.6	16	0.8	90	4.5	53	2.7	3	0.2	153
3245	313.7	32	3.1	150	14.5	5	0.5	7	0.7	72
2224	1158.9	51	26.6	93	48.5	14	7.3	1	0.5	258
3067	4900.4	59	94.3	130	207.7	26	41.5	6	9.6	150
4431	4987.2	58	65.3	169	190.2	52	58.5	5	5.6	179
3067	4900.4	59	94.3	130	207.7	26	41.5	6	9.6	150
3067	4900.4	59	94.3	130	207.7	26	41.5	6	9.6	150
2224	1158.9	51	26.6	93	48.5	14	7.3	1	0.5	258
1481	2742.1	28	51.8	83	153.7	30	55.5	3	5.6	101
4651	232.6	16	0.8	90	4.5	53	2.7	3	0.2	153
4297	918.3	86	18.4	206	44.0	95	20.3	10	2.1	1618
4297	918.3	86	18.4	206	44.0	95	20.3	10	2.1	1618
4297	918.3	86	18.4	206	44.0	95	20.3	10	2.1	1618
1137	56.9	46	2.3	14	0.7	20	1.0	1	0.1	106

3391	34.7	2557	34.7	20	34.7	61	34.7	1	1.9	406
3372	1671.0	18	8.9	98	48.6	44	21.8	5	2.5	200
3968	4281.1	27	29.1	243	262.2	46	49.6	10	10.8	171
3968	4281.1	27	29.1	243	262.2	46	49.6	10	10.8	171
2820	1822.1	27	17.4	314	202.9	27	17.4	3	1.9	199
2820	1822.1	27	17.4	314	202.9	27	17.4	3	1.9	199
2820	1822.1	27	17.4	314	202.9	27	17.4	3	1.9	199
5280	547.0	24	2.5	164	17.0	24	2.5	5	0.5	140
5280	547.0	24	2.5	164	17.0	24	2.5	5	0.5	140
5280	547.0	24	2.5	164	17.0	24	2.5	5	0.5	140
3968	4281.1	27	29.1	243	262.2	46	49.6	10	10.8	171
3968	4281.1	27	29.1	243	262.2	46	49.6	10	10.8	171
3968	4281.1	27	29.1	243	262.2	46	49.6	10	10.8	171
3968	4281.1	27	29.1	243	262.2	46	49.6	10	10.8	171
3968	4281.1	27	29.1	243	262.2	46	49.6	10	10.8	171
3372	1671.0	18	8.9	98	48.6	44	21.8	5	2.5	200
1137	56.9	46	2.3	14	0.7	20	1.0	1	0.1	106
2096	104.8	10	0.5	87	4.4	22	1.1	6	0.3	276
2366	586.5	6	1.5	54	13.4	12	3.0	8	2.0	57
2366	586.5	6	1.5	54	13.4	12	3.0	8	2.0	57

2366	586.5	6	1.5	54	13.4	12	3.0	8	2.0	57
2366	586.5	6	1.5	54	13.4	12	3.0	8	2.0	57
3389	509.6	8	1.2	57	8.6	26	3.9	8	1.2	221
3389	509.6	8	1.2	57	8.6	26	3.9	8	1.2	221
3389	509.6	8	1.2	57	8.6	26	3.9	8	1.2	221
1779	341.4	10	1.9	21	4.0	21	4.0	6	1.2	336
1779	341.4	10	1.9	21	4.0	21	4.0	6	1.2	336
1779	341.4	10	1.9	21	4.0	21	4.0	6	1.2	336
1779	341.4	10	1.9	21	4.0	21	4.0	6	1.2	336
1779	341.4	10	1.9	21	4.0	21	4.0	6	1.2	336
1779	341.4	10	1.9	21	4.0	21	4.0	6	1.2	336
1779	341.4	10	1.9	21	4.0	21	4.0	6	1.2	336
1779	341.4	10	1.9	21	4.0	21	4.0	6	1.2	336
1779	341.4	10	1.9	21	4.0	21	4.0	6	1.2	336
1779	341.4	10	1.9	21	4.0	21	4.0	6	1.2	336
2096	104.8	10	0.5	87	4.4	22	1.1	6	0.3	276
2096	104.8	10	0.5	87	4.4	22	1.1	6	0.3	276
1779	341.4	10	1.9	21	4.0	21	4.0	6	1.2	336
1779	341.4	10	1.9	21	4.0	21	4.0	6	1.2	336
1779	341.4	10	1.9	21	4.0	21	4.0	6	1.2	336
1779	341.4	10	1.9	21	4.0	21	4.0	6	1.2	336

1779	341.4	10	1.9	21	4.0	21	4.0	6	1.2	336
1779	341.4	10	1.9	21	4.0	21	4.0	6	1.2	336
1779	341.4	10	1.9	21	4.0	21	4.0	6	1.2	336
1779	341.4	10	1.9	21	4.0	21	4.0	6	1.2	336
1779	341.4	10	1.9	21	4.0	21	4.0	6	1.2	336
3389	509.6	8	1.2	57	8.6	26	3.9	8	1.2	221
3389	509.6	8	1.2	57	8.6	26	3.9	8	1.2	221
3389	509.6	8	1.2	57	8.6	26	3.9	8	1.2	221
2366	586.5	6	1.5	54	13.4	12	3.0	8	2.0	57
2366	586.5	6	1.5	54	13.4	12	3.0	8	2.0	57
2366	586.5	6	1.5	54	13.4	12	3.0	8	2.0	57
2366	586.5	6	1.5	54	13.4	12	3.0	8	2.0	57
4613	1453.7	23	7.2	119	37.5	39	12.3	2	0.6	358

vel Census Data

			Census Explorer (resident-based data)					
			> 16 years		Workers who own car, truck, or van	Workers without personal vehicles		Tota
Res Other Race Density	Res Two or More Races	Res Two or More Races Density	Res Workers	Res Worker Density		Res Workers _NoAuto	Res Worker _NoAuto Density	All Jobs
239.7	154	246.1	2517	4022	1716	801	1279.8	8977
14.0	32	7.7	490	118	380	110	26.6	1847
33.2	511	72.5	1967	279	951	1016	144.2	2180
33.2	511	72.5	1967	279	951	1016	144.2	2180
33.2	511	72.5	1967	279	951	1016	144.2	2180
33.2	295	51.3	2524	439	1848	676	117.4	4947
155.0	230	120.1	2574	1344	2369	205	107.0	1791
8.0	215	10.8	3665	183	3181	484	24.2	2538
8.0	215	10.8	3665	183	3181	484	24.2	2538
523.2	291	120.2	2831	1169	2508	323	133.4	5606
21.8	286	17.2	3513	211	3218	295	17.7	2344
39.6	98	47.3	1725	833	1253	472	228.0	2995
16.3	234	11.7	2953	148	2576	377	18.9	851
16.3	234	11.7	2953	148	2576	377	18.9	851
16.3	234	11.7	2953	148	2576	377	18.9	851
16.3	234	11.7	2953	148	2576	377	18.9	851

16.3	234	11.7	2953	148	2576	377	18.9	851
16.3	234	11.7	2953	148	2576	377	18.9	851
16.3	234	11.7	2953	148	2576	377	18.9	851
204.4	216	122.6	2459	1396	2178	281	159.5	1366
204.4	216	122.6	2459	1396	2178	281	159.5	1366
204.4	216	122.6	2459	1396	2178	281	159.5	1366
204.4	216	122.6	2459	1396	2178	281	159.5	1366
204.6	216	122.8	2459	1398	2178	281	159.7	1366
204.6	216	122.8	2459	1398	2178	281	159.7	1366
204.6	216	122.8	2459	1398	2178	281	159.7	1366
155.0	230	120.1	2574	1344	2369	205	107.0	1791
155.0	230	120.1	2574	1344	2369	205	107.0	1791
53.2	208	64.0	2413	742	2095	318	97.8	1131
53.2	208	64.0	2413	742	2095	318	97.8	1131
53.2	208	64.0	2413	742	2095	318	97.8	1131
53.2	208	64.0	2413	742	2095	318	97.8	1131
53.2	208	64.0	2413	742	2095	318	97.8	1131
53.2	208	64.0	2413	742	2095	318	97.8	1131
53.2	208	64.0	2413	742	2095	318	97.8	1131
53.2	208	64.0	2413	742	2095	318	97.8	1131

53.2	208	64.0	2413	742	2095	318	97.8	1131
8.0	215	10.8	3665	183	3181	484	24.2	2538
523.2	291	120.2	2831	1169	2508	323	133.4	5606
523.2	291	120.2	2831	1169	2508	323	133.4	5606
523.2	291	120.2	2831	1169	2508	323	133.4	5606
46.2	350	17.5	4717	236	3909	808	40.4	3008
46.2	350	17.5	4717	236	3909	808	40.4	3008
523.2	291	120.2	2831	1169	2508	323	133.4	5606
8.0	215	10.8	3665	183	3181	484	24.2	2538
57.1	251	48.1	3695	708	3387	308	59.0	1348
57.1	251	48.1	3695	708	3387	308	59.0	1348
57.1	251	48.1	3695	708	3387	308	59.0	1348
57.1	251	48.1	3695	708	3387	308	59.0	1348
57.1	251	48.1	3695	708	3387	308	59.0	1348
57.1	251	48.1	3695	708	3387	308	59.0	1348
57.1	251	48.1	3695	708	3387	308	59.0	1348
57.1	251	48.1	3695	708	3387	308	59.0	1348
57.1	251	48.1	3695	708	3387	308	59.0	1348
57.1	251	48.1	3695	708	3387	308	59.0	1348
57.1	251	48.1	3695	708	3387	308	59.0	1348
57.1	251	48.1	3695	708	3387	308	59.0	1348

57.1	251	48.1	3695	708	3387	308	59.0	1348
57.1	251	48.1	3695	708	3387	308	59.0	1348
57.1	251	48.1	3695	708	3387	308	59.0	1348
57.1	251	48.1	3695	708	3387	308	59.0	1348
204.6	216	122.8	2459	1398	2178	281	159.7	1366
204.6	216	122.8	2459	1398	2178	281	159.7	1366
16.3	234	11.7	2953	148	2576	377	18.9	851
16.3	234	11.7	2953	148	2576	377	18.9	851
16.3	234	11.7	2953	148	2576	377	18.9	851
16.3	234	11.7	2953	148	2576	377	18.9	851
16.3	234	11.7	2953	148	2576	377	18.9	851
16.3	234	11.7	2953	148	2576	377	18.9	851
16.3	234	11.7	2953	148	2576	377	18.9	851
39.6	98	47.3	1725	833	1253	472	227.8	2995
33.2	511	72.5	1967	279	951	1016	144.2	2180
33.2	511	72.5	1967	279	951	1016	144.2	2180
9.5	112	13.1	1846	217	1372	474	55.6	1794
21.6	150	66.2	1493	659	1239	254	112.1	1476
21.6	150	66.2	1493	659	1239	254	112.1	1476
932.7	106	203.0	1168	2237	1022	146	279.6	2073

292.3	229	66.4	2691	780	2579	112	32.5	3786
292.3	229	66.4	2691	780	2579	112	32.5	3786
1506.6	256	479.1	1392	2605	1291	101	189.0	1683
345.8	309	66.0	3173	678	2861	312	66.7	860
345.8	309	66.0	3173	678	2861	312	66.7	860
345.8	309	66.0	2194	469	1912	282	60.3	860
7.7	171	8.6	2194	110	1912	282	14.1	837
7.0	113	10.9	1655	160	1339	316	30.5	4903
134.4	96	50.0	1369	713	1174	195	101.6	4957
239.7	154	246.1	2517	4022	1716	801	1279.8	8977
201.5	233	262.2	3303	3718	2464	839	944.3	4475
239.7	154	246.1	2517	4022	1716	801	1279.8	8977
239.7	154	246.1	2517	4022	1716	801	1279.8	8977
134.4	96	50.0	1369	713	1174	195	101.6	4957
187.0	57	105.5	756	1400	642	114	211.1	480
7.7	171	8.6	2194	110	1912	282	14.1	837
345.8	309	66.0	3173	678	2861	312	66.7	860
345.8	309	66.0	3173	678	2861	312	66.7	860
345.8	309	66.0	3173	678	2861	312	66.7	860
5.3	38	1.9	558	28	375	183	9.2	2011

34.7	10	19.3	0	0	0	0	0.0	1819
99.1	99	49.1	1776	880	1171	605	299.8	597
184.5	185	199.6	2415	2606	2115	300	323.7	373
184.5	185	199.6	2415	2606	2115	300	323.7	373
128.6	97	62.7	1895	1224	1616	279	180.3	813
128.6	97	62.7	1895	1224	1616	279	180.3	813
128.6	97	62.7	1895	1224	1616	279	180.3	813
14.5	186	19.3	2511	260	2321	190	19.7	454
14.5	186	19.3	2511	260	2321	190	19.7	454
14.5	186	19.3	2511	260	2321	190	19.7	454
184.5	185	199.6	2415	2606	2115	300	323.7	373
184.5	185	199.6	2415	2606	2115	300	323.7	373
184.5	185	199.6	2415	2606	2115	300	323.7	373
184.5	185	199.6	2415	2606	2115	300	323.7	373
184.5	185	199.6	2415	2606	2115	300	323.7	373
99.1	99	49.1	1776	880	1171	605	299.8	597
5.3	38	1.9	558	28	375	183	9.2	2011
13.8	42	2.1	1223	61	1029	194	9.7	928
14.1	89	22.1	956	237	855	101	25.0	453
14.1	89	22.1	956	237	855	101	25.0	453

14.1	89	22.1	956	237	855	101	25.0	453
14.1	89	22.1	956	237	855	101	25.0	453
33.2	79	11.9	1281	193	960	321	48.3	121
33.2	79	11.9	1281	193	960	321	48.3	121
33.2	79	11.9	1281	193	960	321	48.3	121
64.5	76	14.6	1003	192	841	162	31.1	1608
64.5	76	14.6	1003	192	841	162	31.1	1608
64.5	76	14.6	1003	192	841	162	31.1	1608
64.5	76	14.6	1003	192	841	162	31.1	1608
64.5	76	14.6	1003	192	841	162	31.1	1608
64.5	76	14.6	1003	192	841	162	31.1	1608
64.5	76	14.6	1003	192	841	162	31.1	1608
64.5	76	14.6	1003	192	841	162	31.1	1608
64.5	76	14.6	1003	192	841	162	31.1	1608
13.8	42	2.1	1223	61	1029	194	9.7	928
13.8	42	2.1	1223	61	1029	194	9.7	928
64.5	76	14.6	1003	192	841	162	31.1	1608
64.5	76	14.6	1003	192	841	162	31.1	1608
64.5	76	14.6	1003	192	841	162	31.1	1608
64.5	76	14.6	1003	192	841	162	31.1	1608

64.5	76	14.6	1003	192	841	162	31.1	1608
64.5	76	14.6	1003	192	841	162	31.1	1608
64.5	76	14.6	1003	192	841	162	31.1	1608
64.5	76	14.6	1003	192	841	162	31.1	1608
64.5	76	14.6	1003	192	841	162	31.1	1608
33.2	79	11.9	1281	193	960	321	48.3	121
33.2	79	11.9	1281	193	960	321	48.3	121
33.2	79	11.9	1281	193	960	321	48.3	121
14.1	89	22.1	956	237	855	101	25.0	453
14.1	89	22.1	956	237	855	101	25.0	453
14.1	89	22.1	956	237	855	101	25.0	453
14.1	89	22.1	956	237	855	101	25.0	453
112.8	185	58.3	2996	944	2699	297	93.6	671

al Jobs	Worker Sex				Worker Age					
All Jobs Density	Work Male	Work Male Density	Work Female	Work Female Density	Work <29	Work <29 Density	Work 30 to 54	Work 30 to 54 Density	Work >55	Work >55 Density
14343.2	4180	6678.7	4797	7664.5	2925	4673.5	4339	6932.8	1713	2737.0
446.5	872	210.8	975	235.7	653	157.8	849	205.2	345	83.4
309.4	1052	149.3	1128	160.1	1513	214.8	476	67.6	191	27.1
309.4	1052	149.3	1128	160.1	1513	214.8	476	67.6	191	27.1
309.4	1052	149.3	1128	160.1	1513	214.8	476	67.6	191	27.1
859.5	2153	374.1	2794	485.4	1328	230.7	2402	417.3	1217	211.4
934.9	882	460.4	909	474.5	506	264.1	913	476.6	372	194.2
126.9	825	41.3	1713	85.7	619	31.0	1412	70.6	507	25.4
126.9	825	41.3	1713	85.7	619	31.0	1412	70.6	507	25.4
2315.0	2728	1126.5	2878	1188.5	1713	707.4	2783	1149.2	1110	458.4
140.7	1396	83.8	948	56.9	609	36.6	1252	75.1	483	29.0
1446.5	1175	567.5	1820	879.0	622	300.4	1658	800.8	715	345.3
42.6	470	23.5	381	19.1	154	7.7	451	22.6	246	12.3
42.6	470	23.5	381	19.1	154	7.7	451	22.6	246	12.3
42.6	470	23.5	381	19.1	154	7.7	451	22.6	246	12.3
42.6	470	23.5	381	19.1	154	7.7	451	22.6	246	12.3

42.6	470	23.5	381	19.1	154	7.7	451	22.6	246	12.3
42.6	470	23.5	381	19.1	154	7.7	451	22.6	246	12.3
42.6	470	23.5	381	19.1	154	7.7	451	22.6	246	12.3
775.6	698	396.3	668	379.3	453	257.2	672	381.6	241	136.8
775.6	698	396.3	668	379.3	453	257.2	672	381.6	241	136.8
775.6	698	396.3	668	379.3	453	257.2	672	381.6	241	136.8
775.6	698	396.3	668	379.3	453	257.2	672	381.6	241	136.8
776.4	698	396.7	668	379.7	453	257.5	672	381.9	241	137.0
776.4	698	396.7	668	379.7	453	257.5	672	381.9	241	137.0
776.4	698	396.7	668	379.7	453	257.5	672	381.9	241	137.0
934.9	882	460.4	909	474.5	506	264.1	913	476.6	372	194.2
934.9	882	460.4	909	474.5	506	264.1	913	476.6	372	194.2
347.7	507	155.9	624	191.9	347	106.7	551	169.4	233	71.6
347.7	507	155.9	624	191.9	347	106.7	551	169.4	233	71.6
347.7	507	155.9	624	191.9	347	106.7	551	169.4	233	71.6
347.7	507	155.9	624	191.9	347	106.7	551	169.4	233	71.6
347.7	507	155.9	624	191.9	347	106.7	551	169.4	233	71.6
347.7	507	155.9	624	191.9	347	106.7	551	169.4	233	71.6
347.7	507	155.9	624	191.9	347	106.7	551	169.4	233	71.6
347.7	507	155.9	624	191.9	347	106.7	551	169.4	233	71.6
347.7	507	155.9	624	191.9	347	106.7	551	169.4	233	71.6

347.7	507	155.9	624	191.9	347	106.7	551	169.4	233	71.6
126.9	825	41.3	1713	85.7	619	31.0	1412	70.6	507	25.4
2315.0	2728	1126.5	2878	1188.5	1713	707.4	2783	1149.2	1110	458.4
2315.0	2728	1126.5	2878	1188.5	1713	707.4	2783	1149.2	1110	458.4
2315.0	2728	1126.5	2878	1188.5	1713	707.4	2783	1149.2	1110	458.4
150.4	1739	87.0	1269	63.5	763	38.2	1597	79.9	648	32.4
150.4	1739	87.0	1269	63.5	763	38.2	1597	79.9	648	32.4
2315.0	2728	1126.5	2878	1188.5	1713	707.4	2783	1149.2	1110	458.4
126.9	825	41.3	1713	85.7	619	31.0	1412	70.6	507	25.4
258.4	513	98.3	835	160.1	299	57.3	733	140.5	316	60.6
258.4	513	98.3	835	160.1	299	57.3	733	140.5	316	60.6
258.4	513	98.3	835	160.1	299	57.3	733	140.5	316	60.6
258.4	513	98.3	835	160.1	299	57.3	733	140.5	316	60.6
258.4	513	98.3	835	160.1	299	57.3	733	140.5	316	60.6
258.4	513	98.3	835	160.1	299	57.3	733	140.5	316	60.6
258.4	513	98.3	835	160.1	299	57.3	733	140.5	316	60.6
258.4	513	98.3	835	160.1	299	57.3	733	140.5	316	60.6
258.4	513	98.3	835	160.1	299	57.3	733	140.5	316	60.6
258.4	513	98.3	835	160.1	299	57.3	733	140.5	316	60.6
258.4	513	98.3	835	160.1	299	57.3	733	140.5	316	60.6

258.4	513	98.3	835	160.1	299	57.3	733	140.5	316	60.6
258.4	513	98.3	835	160.1	299	57.3	733	140.5	316	60.6
258.4	513	98.3	835	160.1	299	57.3	733	140.5	316	60.6
258.4	513	98.3	835	160.1	299	57.3	733	140.5	316	60.6
776.4	698	396.7	668	379.7	453	257.5	672	381.9	241	137.0
776.4	698	396.7	668	379.7	453	257.5	672	381.9	241	137.0
42.6	470	23.5	381	19.1	154	7.7	451	22.6	246	12.3
42.6	470	23.5	381	19.1	154	7.7	451	22.6	246	12.3
42.6	470	23.5	381	19.1	154	7.7	451	22.6	246	12.3
42.6	470	23.5	381	19.1	154	7.7	451	22.6	246	12.3
42.6	470	23.5	381	19.1	154	7.7	451	22.6	246	12.3
42.6	470	23.5	381	19.1	154	7.7	451	22.6	246	12.3
42.6	470	23.5	381	19.1	154	7.7	451	22.6	246	12.3
1445.4	1175	567.1	1820	878.4	622	300.2	1658	800.2	715	345.1
309.4	1052	149.3	1128	160.1	1513	214.8	476	67.6	191	27.1
309.4	1052	149.3	1128	160.1	1513	214.8	476	67.6	191	27.1
210.5	726	85.2	1068	125.3	677	79.4	799	93.8	318	37.3
651.3	616	271.8	860	379.5	309	136.3	820	361.8	347	153.1
651.3	616	271.8	860	379.5	309	136.3	820	361.8	347	153.1
3970.1	930	1781.1	1143	2189.0	328	628.2	1123	2150.7	622	1191.2

1097.0	1382	400.4	2404	696.5	832	241.1	2104	609.6	850	246.3
1097.0	1382	400.4	2404	696.5	832	241.1	2104	609.6	850	246.3
3149.8	832	1557.1	851	1592.7	574	1074.3	859	1607.7	250	467.9
183.8	457	97.7	403	86.1	252	53.9	445	95.1	163	34.8
183.8	457	97.7	403	86.1	252	53.9	445	95.1	163	34.8
183.8	457	97.7	403	86.1	252	53.9	445	95.1	163	34.8
41.9	524	26.2	313	15.7	183	9.2	461	23.1	193	9.7
474.0	3025	292.4	1878	181.5	1385	133.9	2690	260.0	828	80.0
2583.1	2722	1418.4	2235	1164.7	940	489.8	2820	1469.5	1197	623.8
14343.2	4180	6678.7	4797	7664.5	2925	4673.5	4339	6932.8	1713	2737.0
5036.7	2568	2890.4	1907	2146.4	1291	1453.1	2373	2670.9	811	912.8
14343.2	4180	6678.7	4797	7664.5	2925	4673.5	4339	6932.8	1713	2737.0
14343.2	4180	6678.7	4797	7664.5	2925	4673.5	4339	6932.8	1713	2737.0
2583.1	2722	1418.4	2235	1164.7	940	489.8	2820	1469.5	1197	623.8
888.7	261	483.2	219	405.5	103	190.7	272	503.6	105	194.4
41.9	524	26.2	313	15.7	183	9.2	461	23.1	193	9.7
183.8	457	97.7	403	86.1	252	53.9	445	95.1	163	34.8
183.8	457	97.7	403	86.1	252	53.9	445	95.1	163	34.8
183.8	457	97.7	403	86.1	252	53.9	445	95.1	163	34.8
100.6	72	3.6	57	2.9	36	1.8	64	3.2	29	1.5

3508.7	1145	2208.6	674	1300.1	133	256.5	1315	2536.5	371	715.6
295.8	285	141.2	312	154.6	178	88.2	278	137.8	141	69.9
402.4	152	164.0	221	238.4	89	96.0	181	195.3	103	111.1
402.4	152	164.0	221	238.4	89	96.0	181	195.3	103	111.1
525.3	396	255.9	417	269.4	221	142.8	402	259.8	190	122.8
525.3	396	255.9	417	269.4	221	142.8	402	259.8	190	122.8
525.3	396	255.9	417	269.4	221	142.8	402	259.8	190	122.8
47.0	194	20.1	260	26.9	149	15.4	212	22.0	93	9.6
47.0	194	20.1	260	26.9	149	15.4	212	22.0	93	9.6
47.0	194	20.1	260	26.9	149	15.4	212	22.0	93	9.6
402.4	152	164.0	221	238.4	89	96.0	181	195.3	103	111.1
402.4	152	164.0	221	238.4	89	96.0	181	195.3	103	111.1
402.4	152	164.0	221	238.4	89	96.0	181	195.3	103	111.1
402.4	152	164.0	221	238.4	89	96.0	181	195.3	103	111.1
402.4	152	164.0	221	238.4	89	96.0	181	195.3	103	111.1
295.8	285	141.2	312	154.6	178	88.2	278	137.8	141	69.9
100.6	72	3.6	57	2.9	36	1.8	64	3.2	29	1.5
46.4	532	26.6	396	19.8	195	9.8	444	22.2	289	14.5
112.3	224	55.5	229	56.8	160	39.7	185	45.9	108	26.8
112.3	224	55.5	229	56.8	160	39.7	185	45.9	108	26.8

112.3	224	55.5	229	56.8	160	39.7	185	45.9	108	26.8
112.3	224	55.5	229	56.8	160	39.7	185	45.9	108	26.8
18.2	68	10.2	53	8.0	27	4.1	61	9.2	33	5.0
18.2	68	10.2	53	8.0	27	4.1	61	9.2	33	5.0
18.2	68	10.2	53	8.0	27	4.1	61	9.2	33	5.0
308.6	768	147.4	840	161.2	466	89.4	720	138.2	422	81.0
308.6	768	147.4	840	161.2	466	89.4	720	138.2	422	81.0
308.6	768	147.4	840	161.2	466	89.4	720	138.2	422	81.0
308.6	768	147.4	840	161.2	466	89.4	720	138.2	422	81.0
308.6	768	147.4	840	161.2	466	89.4	720	138.2	422	81.0
308.6	768	147.4	840	161.2	466	89.4	720	138.2	422	81.0
308.6	768	147.4	840	161.2	466	89.4	720	138.2	422	81.0
308.6	768	147.4	840	161.2	466	89.4	720	138.2	422	81.0
308.6	768	147.4	840	161.2	466	89.4	720	138.2	422	81.0
46.4	532	26.6	396	19.8	195	9.8	444	22.2	289	14.5
46.4	532	26.6	396	19.8	195	9.8	444	22.2	289	14.5
308.6	768	147.4	840	161.2	466	89.4	720	138.2	422	81.0
308.6	768	147.4	840	161.2	466	89.4	720	138.2	422	81.0
308.6	768	147.4	840	161.2	466	89.4	720	138.2	422	81.0
308.6	768	147.4	840	161.2	466	89.4	720	138.2	422	81.0

308.6	768	147.4	840	161.2	466	89.4	720	138.2	422	81.0
308.6	768	147.4	840	161.2	466	89.4	720	138.2	422	81.0
308.6	768	147.4	840	161.2	466	89.4	720	138.2	422	81.0
308.6	768	147.4	840	161.2	466	89.4	720	138.2	422	81.0
308.6	768	147.4	840	161.2	466	89.4	720	138.2	422	81.0
18.2	68	10.2	53	8.0	27	4.1	61	9.2	33	5.0
18.2	68	10.2	53	8.0	27	4.1	61	9.2	33	5.0
18.2	68	10.2	53	8.0	27	4.1	61	9.2	33	5.0
112.3	224	55.5	229	56.8	160	39.7	185	45.9	108	26.8
112.3	224	55.5	229	56.8	160	39.7	185	45.9	108	26.8
112.3	224	55.5	229	56.8	160	39.7	185	45.9	108	26.8
112.3	224	55.5	229	56.8	160	39.7	185	45.9	108	26.8
211.4	326	102.7	345	108.7	187	58.9	334	105.3	150	47.3

LEHD On TheMap (Employment-base

Worker Education								
Work <High School Diploma	Work <HS Density	Work HS Diploma, No College	Work HS-Diploma Density	Work Some College, no Degree	Work Some College Density	Work College Degree	Work College Degree Density	Work <$1250
967	1545.1	1309	2091.5	2003	3200.3	1773	2832.9	2863
170	41.1	299	72.3	398	96.2	327	79.0	854
73	10.4	151	21.4	235	33.4	208	29.5	1696
73	10.4	151	21.4	235	33.4	208	29.5	1696
73	10.4	151	21.4	235	33.4	208	29.5	1696
362	62.9	798	138.6	1166	202.6	1293	224.6	1765
155	80.9	348	181.6	461	240.6	321	167.6	630
220	11.0	477	23.9	709	35.5	513	25.7	608
220	11.0	477	23.9	709	35.5	513	25.7	608
791	326.6	1036	427.8	1218	503.0	848	350.2	2066
266	16.0	490	29.4	607	36.4	372	22.3	414
217	104.8	501	242.0	821	396.5	834	402.8	680
86	4.3	191	9.6	254	12.7	166	8.3	222
86	4.3	191	9.6	254	12.7	166	8.3	222
86	4.3	191	9.6	254	12.7	166	8.3	222
86	4.3	191	9.6	254	12.7	166	8.3	222

86	4.3	191	9.6	254	12.7	166	8.3	222
86	4.3	191	9.6	254	12.7	166	8.3	222
86	4.3	191	9.6	254	12.7	166	8.3	222
125	71.0	291	165.2	309	175.4	188	106.7	456
125	71.0	291	165.2	309	175.4	188	106.7	456
125	71.0	291	165.2	309	175.4	188	106.7	456
125	71.0	291	165.2	309	175.4	188	106.7	456
125	71.0	291	165.4	309	175.6	188	106.8	456
125	71.0	291	165.4	309	175.6	188	106.8	456
125	71.0	291	165.4	309	175.6	188	106.8	456
155	80.9	348	181.6	461	240.6	321	167.6	630
155	80.9	348	181.6	461	240.6	321	167.6	630
90	27.7	217	66.7	290	89.2	187	57.5	465
90	27.7	217	66.7	290	89.2	187	57.5	465
90	27.7	217	66.7	290	89.2	187	57.5	465
90	27.7	217	66.7	290	89.2	187	57.5	465
90	27.7	217	66.7	290	89.2	187	57.5	465
90	27.7	217	66.7	290	89.2	187	57.5	465
90	27.7	217	66.7	290	89.2	187	57.5	465
90	27.7	217	66.7	290	89.2	187	57.5	465

90	27.7	217	66.7	290	89.2	187	57.5	465
220	11.0	477	23.9	709	35.5	513	25.7	608
791	326.6	1036	427.8	1218	503.0	848	350.2	2066
791	326.6	1036	427.8	1218	503.0	848	350.2	2066
791	326.6	1036	427.8	1218	503.0	848	350.2	2066
468	23.4	607	30.4	696	34.8	474	23.7	1071
468	23.4	607	30.4	696	34.8	474	23.7	1071
791	326.6	1036	427.8	1218	503.0	848	350.2	2066
220	11.0	477	23.9	709	35.5	513	25.7	608
137	26.3	291	55.8	341	65.4	280	53.7	412
137	26.3	291	55.8	341	65.4	280	53.7	412
137	26.3	291	55.8	341	65.4	280	53.7	412
137	26.3	291	55.8	341	65.4	280	53.7	412
137	26.3	291	55.8	341	65.4	280	53.7	412
137	26.3	291	55.8	341	65.4	280	53.7	412
137	26.3	291	55.8	341	65.4	280	53.7	412
137	26.3	291	55.8	341	65.4	280	53.7	412
137	26.3	291	55.8	341	65.4	280	53.7	412
137	26.3	291	55.8	341	65.4	280	53.7	412
137	26.3	291	55.8	341	65.4	280	53.7	412
137	26.3	291	55.8	341	65.4	280	53.7	412

137	26.3	291	55.8	341	65.4	280	53.7	412
137	26.3	291	55.8	341	65.4	280	53.7	412
137	26.3	291	55.8	341	65.4	280	53.7	412
137	26.3	291	55.8	341	65.4	280	53.7	412
125	71.0	291	165.4	309	175.6	188	106.8	456
125	71.0	291	165.4	309	175.6	188	106.8	456
86	4.3	191	9.6	254	12.7	166	8.3	222
86	4.3	191	9.6	254	12.7	166	8.3	222
86	4.3	191	9.6	254	12.7	166	8.3	222
86	4.3	191	9.6	254	12.7	166	8.3	222
86	4.3	191	9.6	254	12.7	166	8.3	222
86	4.3	191	9.6	254	12.7	166	8.3	222
86	4.3	191	9.6	254	12.7	166	8.3	222
217	104.7	501	241.8	821	396.2	834	402.5	680
73	10.4	151	21.4	235	33.4	208	29.5	1696
73	10.4	151	21.4	235	33.4	208	29.5	1696
151	17.7	289	33.9	385	45.2	292	34.3	720
127	56.0	248	109.4	274	120.9	418	184.4	422
127	56.0	248	109.4	274	120.9	418	184.4	422
216	413.7	300	574.5	596	1141.4	633	1212.3	832

539	156.2	655	189.8	986	285.7	774	224.3	842
539	156.2	655	189.8	986	285.7	774	224.3	842
171	320.0	250	467.9	414	774.8	274	512.8	601
118	25.2	136	29.1	224	47.9	130	27.8	263
118	25.2	136	29.1	224	47.9	130	27.8	263
118	25.2	136	29.1	224	47.9	130	27.8	263
139	7.0	165	8.3	218	10.9	132	6.6	208
529	51.1	800	77.3	1170	113.1	1019	98.5	938
438	228.2	946	493.0	1471	766.5	1162	605.5	906
967	1545.1	1309	2091.5	2003	3200.3	1773	2832.9	2863
393	442.3	717	807.0	1105	1243.7	969	1090.6	1181
967	1545.1	1309	2091.5	2003	3200.3	1773	2832.9	2863
967	1545.1	1309	2091.5	2003	3200.3	1773	2832.9	2863
438	228.2	946	493.0	1471	766.5	1162	605.5	906
33	61.1	89	164.8	130	240.7	125	231.4	122
139	7.0	165	8.3	218	10.9	132	6.6	208
118	25.2	136	29.1	224	47.9	130	27.8	263
118	25.2	136	29.1	224	47.9	130	27.8	263
118	25.2	136	29.1	224	47.9	130	27.8	263
13	0.7	25	1.3	31	1.6	24	1.2	47

127	245.0	394	760.0	657	1267.3	508	979.9	38
61	30.2	131	64.9	146	72.3	81	40.1	276
39	42.1	67	72.3	104	112.2	74	79.8	163
39	42.1	67	72.3	104	112.2	74	79.8	163
68	43.9	177	114.4	203	131.2	144	93.0	268
68	43.9	177	114.4	203	131.2	144	93.0	268
68	43.9	177	114.4	203	131.2	144	93.0	268
27	2.8	82	8.5	111	11.5	85	8.8	179
27	2.8	82	8.5	111	11.5	85	8.8	179
27	2.8	82	8.5	111	11.5	85	8.8	179
39	42.1	67	72.3	104	112.2	74	79.8	163
39	42.1	67	72.3	104	112.2	74	79.8	163
39	42.1	67	72.3	104	112.2	74	79.8	163
39	42.1	67	72.3	104	112.2	74	79.8	163
39	42.1	67	72.3	104	112.2	74	79.8	163
61	30.2	131	64.9	146	72.3	81	40.1	276
13	0.7	25	1.3	31	1.6	24	1.2	47
153	7.7	186	9.3	213	10.7	181	9.1	306
37	9.2	73	18.1	116	28.8	67	16.6	204
37	9.2	73	18.1	116	28.8	67	16.6	204

37	9.2	73	18.1	116	28.8	67	16.6	204
37	9.2	73	18.1	116	28.8	67	16.6	204
25	3.8	20	3.0	26	3.9	23	3.5	46
25	3.8	20	3.0	26	3.9	23	3.5	46
25	3.8	20	3.0	26	3.9	23	3.5	46
225	43.2	289	55.5	348	66.8	280	53.7	667
225	43.2	289	55.5	348	66.8	280	53.7	667
225	43.2	289	55.5	348	66.8	280	53.7	667
225	43.2	289	55.5	348	66.8	280	53.7	667
225	43.2	289	55.5	348	66.8	280	53.7	667
225	43.2	289	55.5	348	66.8	280	53.7	667
225	43.2	289	55.5	348	66.8	280	53.7	667
225	43.2	289	55.5	348	66.8	280	53.7	667
225	43.2	289	55.5	348	66.8	280	53.7	667
225	43.2	289	55.5	348	66.8	280	53.7	667
153	7.7	186	9.3	213	10.7	181	9.1	306
153	7.7	186	9.3	213	10.7	181	9.1	306
225	43.2	289	55.5	348	66.8	280	53.7	667
225	43.2	289	55.5	348	66.8	280	53.7	667
225	43.2	289	55.5	348	66.8	280	53.7	667
225	43.2	289	55.5	348	66.8	280	53.7	667

225	43.2	289	55.5	348	66.8	280	53.7	667
225	43.2	289	55.5	348	66.8	280	53.7	667
225	43.2	289	55.5	348	66.8	280	53.7	667
225	43.2	289	55.5	348	66.8	280	53.7	667
225	43.2	289	55.5	348	66.8	280	53.7	667
25	3.8	20	3.0	26	3.9	23	3.5	46
25	3.8	20	3.0	26	3.9	23	3.5	46
25	3.8	20	3.0	26	3.9	23	3.5	46
37	9.2	73	18.1	116	28.8	67	16.6	204
37	9.2	73	18.1	116	28.8	67	16.6	204
37	9.2	73	18.1	116	28.8	67	16.6	204
37	9.2	73	18.1	116	28.8	67	16.6	204
56	17.6	134	42.2	169	53.3	125	39.4	245

ed data)

Worker Earnings									
Work <$1250 Density	Work $1251 to $3333	Work $1251 to $3333 Density	Work >$3333	Work >$3333 Density	Work Latino	Work Latino Density	Work White	Work White Density	Work Black
4574.4	3432	5483.6	2682	4285.2	2377	3797.9	8022	12817.4	203
206.4	629	152.0	364	88.0	364	88.0	1636	395.5	37
240.7	290	41.2	194	27.5	294	41.7	1888	268.0	27
240.7	290	41.2	194	27.5	294	41.7	1888	268.0	27
240.7	290	41.2	194	27.5	294	41.7	1888	268.0	27
306.7	1640	284.9	1542	267.9	901	156.5	4497	781.3	85
328.8	620	323.6	541	282.4	271	141.5	1647	859.7	39
30.4	970	48.5	960	48.0	477	23.9	2312	115.6	34
30.4	970	48.5	960	48.0	477	23.9	2312	115.6	34
853.2	2338	965.5	1202	496.4	1572	649.2	4922	2032.5	154
24.8	1037	62.2	893	53.6	623	37.4	2141	128.5	46
328.4	959	463.2	1356	654.9	549	265.2	2733	1320.0	38
11.1	292	14.6	337	16.9	169	8.5	783	39.2	12
11.1	292	14.6	337	16.9	169	8.5	783	39.2	12
11.1	292	14.6	337	16.9	169	8.5	783	39.2	12
11.1	292	14.6	337	16.9	169	8.5	783	39.2	12

11.1	292	14.6	337	16.9	169	8.5	783	39.2	12
11.1	292	14.6	337	16.9	169	8.5	783	39.2	12
11.1	292	14.6	337	16.9	169	8.5	783	39.2	12
258.9	589	334.4	321	182.3	287	163.0	1233	700.1	24
258.9	589	334.4	321	182.3	287	163.0	1233	700.1	24
258.9	589	334.4	321	182.3	287	163.0	1233	700.1	24
258.9	589	334.4	321	182.3	287	163.0	1233	700.1	24
259.2	589	334.8	321	182.4	287	163.1	1233	700.8	24
259.2	589	334.8	321	182.4	287	163.1	1233	700.8	24
259.2	589	334.8	321	182.4	287	163.1	1233	700.8	24
328.8	620	323.6	541	282.4	271	141.5	1647	859.7	39
328.8	620	323.6	541	282.4	271	141.5	1647	859.7	39
143.0	412	126.7	254	78.1	218	67.0	1024	314.8	10
143.0	412	126.7	254	78.1	218	67.0	1024	314.8	10
143.0	412	126.7	254	78.1	218	67.0	1024	314.8	10
143.0	412	126.7	254	78.1	218	67.0	1024	314.8	10
143.0	412	126.7	254	78.1	218	67.0	1024	314.8	10
143.0	412	126.7	254	78.1	218	67.0	1024	314.8	10
143.0	412	126.7	254	78.1	218	67.0	1024	314.8	10
143.0	412	126.7	254	78.1	218	67.0	1024	314.8	10

143.0	412	126.7	254	78.1	218	67.0	1024	314.8	10
30.4	970	48.5	960	48.0	477	23.9	2312	115.6	34
853.2	2338	965.5	1202	496.4	1572	649.2	4922	2032.5	154
853.2	2338	965.5	1202	496.4	1572	649.2	4922	2032.5	154
853.2	2338	965.5	1202	496.4	1572	649.2	4922	2032.5	154
53.6	1131	56.6	806	40.3	884	44.2	2711	135.6	74
53.6	1131	56.6	806	40.3	884	44.2	2711	135.6	74
853.2	2338	965.5	1202	496.4	1572	649.2	4922	2032.5	154
30.4	970	48.5	960	48.0	477	23.9	2312	115.6	34
79.0	561	107.5	375	71.9	251	48.1	1244	238.5	17
79.0	561	107.5	375	71.9	251	48.1	1244	238.5	17
79.0	561	107.5	375	71.9	251	48.1	1244	238.5	17
79.0	561	107.5	375	71.9	251	48.1	1244	238.5	17
79.0	561	107.5	375	71.9	251	48.1	1244	238.5	17
79.0	561	107.5	375	71.9	251	48.1	1244	238.5	17
79.0	561	107.5	375	71.9	251	48.1	1244	238.5	17
79.0	561	107.5	375	71.9	251	48.1	1244	238.5	17
79.0	561	107.5	375	71.9	251	48.1	1244	238.5	17
79.0	561	107.5	375	71.9	251	48.1	1244	238.5	17
79.0	561	107.5	375	71.9	251	48.1	1244	238.5	17
79.0	561	107.5	375	71.9	251	48.1	1244	238.5	17

79.0	561	107.5	375	71.9	251	48.1	1244	238.5	17
79.0	561	107.5	375	71.9	251	48.1	1244	238.5	17
79.0	561	107.5	375	71.9	251	48.1	1244	238.5	17
79.0	561	107.5	375	71.9	251	48.1	1244	238.5	17
259.2	589	334.8	321	182.4	287	163.1	1233	700.8	24
259.2	589	334.8	321	182.4	287	163.1	1233	700.8	24
11.1	292	14.6	337	16.9	169	8.5	783	39.2	12
11.1	292	14.6	337	16.9	169	8.5	783	39.2	12
11.1	292	14.6	337	16.9	169	8.5	783	39.2	12
11.1	292	14.6	337	16.9	169	8.5	783	39.2	12
11.1	292	14.6	337	16.9	169	8.5	783	39.2	12
11.1	292	14.6	337	16.9	169	8.5	783	39.2	12
11.1	292	14.6	337	16.9	169	8.5	783	39.2	12
328.2	959	462.8	1356	654.4	549	265.0	2733	1319.0	38
240.7	290	41.2	194	27.5	294	41.7	1888	268.0	27
240.7	290	41.2	194	27.5	294	41.7	1888	268.0	27
84.5	688	80.7	386	45.3	444	52.1	1591	186.7	31
186.2	468	206.5	586	258.6	349	154.0	1300	573.6	36
186.2	468	206.5	586	258.6	349	154.0	1300	573.6	36
1593.4	629	1204.6	612	1172.1	626	1198.9	1092	2091.4	36

244.0	1673	484.7	1271	368.3	1530	443.3	3020	875.0	138
244.0	1673	484.7	1271	368.3	1530	443.3	3020	875.0	138
1124.8	504	943.3	578	1081.8	729	1364.4	1426	2668.8	72
56.2	372	79.5	225	48.1	316	67.5	794	169.7	13
56.2	372	79.5	225	48.1	316	67.5	794	169.7	13
56.2	372	79.5	225	48.1	316	67.5	794	169.7	13
10.4	430	21.5	199	10.0	288	14.4	741	37.1	15
90.7	1902	183.9	2063	199.4	1042	100.7	4381	423.5	71
472.1	1638	853.6	2413	1257.4	874	455.4	4488	2338.7	104
4574.4	3432	5483.6	2682	4285.2	2377	3797.9	8022	12817.4	203
1329.2	1601	1802.0	1693	1905.5	850	956.7	4008	4511.1	82
4574.4	3432	5483.6	2682	4285.2	2377	3797.9	8022	12817.4	203
4574.4	3432	5483.6	2682	4285.2	2377	3797.9	8022	12817.4	203
472.1	1638	853.6	2413	1257.4	874	455.4	4488	2338.7	104
225.9	132	244.4	226	418.4	73	135.2	442	818.4	5
10.4	430	21.5	199	10.0	288	14.4	741	37.1	15
56.2	372	79.5	225	48.1	316	67.5	794	169.7	13
56.2	372	79.5	225	48.1	316	67.5	794	169.7	13
56.2	372	79.5	225	48.1	316	67.5	794	169.7	13
2.4	52	2.6	30	1.5	27	1.4	120	6.0	2

73.3	178	343.3	1603	3092.0	394	760.0	1553	2995.6	60
136.8	221	109.5	100	49.6	103	51.0	529	262.1	10
175.9	137	147.8	73	78.8	61	65.8	327	352.8	2
175.9	137	147.8	73	78.8	61	65.8	327	352.8	2
173.2	328	211.9	217	140.2	142	91.8	729	471.0	8
173.2	328	211.9	217	140.2	142	91.8	729	471.0	8
173.2	328	211.9	217	140.2	142	91.8	729	471.0	8
18.5	172	17.8	103	10.7	69	7.1	423	43.8	4
18.5	172	17.8	103	10.7	69	7.1	423	43.8	4
18.5	172	17.8	103	10.7	69	7.1	423	43.8	4
175.9	137	147.8	73	78.8	61	65.8	327	352.8	2
175.9	137	147.8	73	78.8	61	65.8	327	352.8	2
175.9	137	147.8	73	78.8	61	65.8	327	352.8	2
175.9	137	147.8	73	78.8	61	65.8	327	352.8	2
175.9	137	147.8	73	78.8	61	65.8	327	352.8	2
136.8	221	109.5	100	49.6	103	51.0	529	262.1	10
2.4	52	2.6	30	1.5	27	1.4	120	6.0	2
15.3	422	21.1	200	10.0	254	12.7	816	40.8	25
50.6	182	45.1	67	16.6	83	20.6	411	101.9	7
50.6	182	45.1	67	16.6	83	20.6	411	101.9	7

50.6	182	45.1	67	16.6	83	20.6	411	101.9	7
50.6	182	45.1	67	16.6	83	20.6	411	101.9	7
6.9	45	6.8	30	4.5	38	5.7	107	16.1	5
6.9	45	6.8	30	4.5	38	5.7	107	16.1	5
6.9	45	6.8	30	4.5	38	5.7	107	16.1	5
128.0	660	126.7	281	53.9	369	70.8	1461	280.4	26
128.0	660	126.7	281	53.9	369	70.8	1461	280.4	26
128.0	660	126.7	281	53.9	369	70.8	1461	280.4	26
128.0	660	126.7	281	53.9	369	70.8	1461	280.4	26
128.0	660	126.7	281	53.9	369	70.8	1461	280.4	26
128.0	660	126.7	281	53.9	369	70.8	1461	280.4	26
128.0	660	126.7	281	53.9	369	70.8	1461	280.4	26
128.0	660	126.7	281	53.9	369	70.8	1461	280.4	26
128.0	660	126.7	281	53.9	369	70.8	1461	280.4	26
15.3	422	21.1	200	10.0	254	12.7	816	40.8	25
15.3	422	21.1	200	10.0	254	12.7	816	40.8	25
128.0	660	126.7	281	53.9	369	70.8	1461	280.4	26
128.0	660	126.7	281	53.9	369	70.8	1461	280.4	26
128.0	660	126.7	281	53.9	369	70.8	1461	280.4	26
128.0	660	126.7	281	53.9	369	70.8	1461	280.4	26

128.0	660	126.7	281	53.9	369	70.8	1461	280.4	26
128.0	660	126.7	281	53.9	369	70.8	1461	280.4	26
128.0	660	126.7	281	53.9	369	70.8	1461	280.4	26
128.0	660	126.7	281	53.9	369	70.8	1461	280.4	26
128.0	660	126.7	281	53.9	369	70.8	1461	280.4	26
6.9	45	6.8	30	4.5	38	5.7	107	16.1	5
6.9	45	6.8	30	4.5	38	5.7	107	16.1	5
6.9	45	6.8	30	4.5	38	5.7	107	16.1	5
50.6	182	45.1	67	16.6	83	20.6	411	101.9	7
50.6	182	45.1	67	16.6	83	20.6	411	101.9	7
50.6	182	45.1	67	16.6	83	20.6	411	101.9	7
50.6	182	45.1	67	16.6	83	20.6	411	101.9	7
77.2	270	85.1	156	49.2	133	41.9	610	192.2	7

									Spa
Worker Race/Ethnicity									Weekday Span of Service [hours]
Work Black Density	Work AIAN	Work AIAN Density	Work Asian	Work Asian Density	Work NHPI	Work NHPI Density	Work Two or More Races	Work Two or More Races Density	Span of Service
324.3	108	172.6	431	688.6	23	36.7	190	303.6	15.68
8.9	16	3.9	119	28.8	5	1.2	34	8.2	14.72
3.8	19	2.7	160	22.7	7	1.0	79	11.2	13.87
3.8	19	2.7	160	22.7	7	1.0	79	11.2	13.87
3.8	19	2.7	160	22.7	7	1.0	79	11.2	14.02
14.8	43	7.5	204	35.4	8	1.4	110	19.1	15.92
20.4	17	8.9	56	29.2	3	1.6	29	15.1	15.52
1.7	29	1.5	116	5.8	3	0.2	44	2.2	15.98
1.7	29	1.5	116	5.8	3	0.2	44	2.2	15.3
63.6	81	33.4	297	122.6	15	6.2	137	56.6	16.35
2.8	24	1.4	91	5.5	2	0.1	40	2.4	11
18.4	33	15.9	127	61.3	3	1.4	61	29.5	4.28
0.6	12	0.6	14	0.7	2	0.1	28	1.4	14.18
0.6	12	0.6	14	0.7	2	0.1	28	1.4	14.18
0.6	12	0.6	14	0.7	2	0.1	28	1.4	14.2
0.6	12	0.6	14	0.7	2	0.1	28	1.4	14.2

0.6	12	0.6	14	0.7	2	0.1	28	1.4	14.22
0.6	12	0.6	14	0.7	2	0.1	28	1.4	14.23
0.6	12	0.6	14	0.7	2	0.1	28	1.4	14.25
13.6	14	7.9	68	38.6	3	1.7	24	13.6	14.23
13.6	14	7.9	68	38.6	3	1.7	24	13.6	14.17
13.6	14	7.9	68	38.6	3	1.7	24	13.6	14.17
13.6	14	7.9	68	38.6	3	1.7	24	13.6	14.17
13.6	14	8.0	68	38.6	3	1.7	24	13.6	14.17
13.6	14	8.0	68	38.6	3	1.7	24	13.6	14.17
13.6	14	8.0	68	38.6	3	1.7	24	13.6	14.17
20.4	17	8.9	56	29.2	3	1.6	29	15.1	14.17
20.4	17	8.9	56	29.2	3	1.6	29	15.1	14.17
3.1	22	6.8	50	15.4	2	0.6	23	7.1	14.18
3.1	22	6.8	50	15.4	2	0.6	23	7.1	14.18
3.1	22	6.8	50	15.4	2	0.6	23	7.1	14.18
3.1	22	6.8	50	15.4	2	0.6	23	7.1	14.18
3.1	22	6.8	50	15.4	2	0.6	23	7.1	14.18
3.1	22	6.8	50	15.4	2	0.6	23	7.1	14.18
3.1	22	6.8	50	15.4	2	0.6	23	7.1	14.18
3.1	22	6.8	50	15.4	2	0.6	23	7.1	14.18

3.1	22	6.8	50	15.4	2	0.6	23	7.1	14.18
1.7	29	1.5	116	5.8	3	0.2	44	2.2	14.18
63.6	81	33.4	297	122.6	15	6.2	137	56.6	14.18
63.6	81	33.4	297	122.6	15	6.2	137	56.6	14.27
63.6	81	33.4	297	122.6	15	6.2	137	56.6	14.27
3.7	42	2.1	115	5.8	5	0.3	61	3.1	6.45
3.7	42	2.1	115	5.8	5	0.3	61	3.1	5.58
63.6	81	33.4	297	122.6	15	6.2	137	56.6	13.15
1.7	29	1.5	116	5.8	3	0.2	44	2.2	13.15
3.3	14	2.7	43	8.2	1	0.2	29	5.6	13.15
3.3	14	2.7	43	8.2	1	0.2	29	5.6	13.15
3.3	14	2.7	43	8.2	1	0.2	29	5.6	13.15
3.3	14	2.7	43	8.2	1	0.2	29	5.6	13.15
3.3	14	2.7	43	8.2	1	0.2	29	5.6	13.15
3.3	14	2.7	43	8.2	1	0.2	29	5.6	13.15
3.3	14	2.7	43	8.2	1	0.2	29	5.6	13.15
3.3	14	2.7	43	8.2	1	0.2	29	5.6	13.15
3.3	14	2.7	43	8.2	1	0.2	29	5.6	13.15
3.3	14	2.7	43	8.2	1	0.2	29	5.6	13.15
3.3	14	2.7	43	8.2	1	0.2	29	5.6	13.15

3.3	14	2.7	43	8.2	1	0.2	29	5.6	13.15
3.3	14	2.7	43	8.2	1	0.2	29	5.6	13.15
3.3	14	2.7	43	8.2	1	0.2	29	5.6	13.15
3.3	14	2.7	43	8.2	1	0.2	29	5.6	13.15
13.6	14	8.0	68	38.6	3	1.7	24	13.6	13.15
13.6	14	8.0	68	38.6	3	1.7	24	13.6	13.15
0.6	12	0.6	14	0.7	2	0.1	28	1.4	13.15
0.6	12	0.6	14	0.7	2	0.1	28	1.4	13.15
0.6	12	0.6	14	0.7	2	0.1	28	1.4	13.15
0.6	12	0.6	14	0.7	2	0.1	28	1.4	13.15
0.6	12	0.6	14	0.7	2	0.1	28	1.4	13.15
0.6	12	0.6	14	0.7	2	0.1	28	1.4	13.15
0.6	12	0.6	14	0.7	2	0.1	28	1.4	13.15
18.3	33	15.9	127	61.3	3	1.4	61	29.4	13.23
3.8	19	2.7	160	22.7	7	1.0	79	11.2	2.02
3.8	19	2.7	160	22.7	7	1.0	79	11.2	2.03
3.6	19	2.2	98	11.5	6	0.7	49	5.7	14.67
15.9	17	7.5	87	38.4	7	3.1	29	12.8	14.85
15.9	17	7.5	87	38.4	7	3.1	29	12.8	14.85
68.9	26	49.8	67	128.3	7	13.4	35	67.0	15.22

40.0	68	19.7	436	126.3	23	6.7	101	29.3	15.23
40.0	68	19.7	436	126.3	23	6.7	101	29.3	15.23
134.8	33	61.8	103	192.8	6	11.2	43	80.5	15.97
2.8	11	2.4	26	5.6	3	0.6	13	2.8	13.58
2.8	11	2.4	26	5.6	3	0.6	13	2.8	13.22
2.8	11	2.4	26	5.6	3	0.6	13	2.8	13.6
0.8	15	0.8	45	2.3	3	0.2	18	0.9	13
6.9	46	4.4	299	28.9	9	0.9	97	9.4	13
54.2	53	27.6	201	104.7	11	5.7	100	52.1	13
324.3	108	172.6	431	688.6	23	36.7	190	303.6	13
92.3	41	46.1	232	261.1	8	9.0	104	117.1	13
324.3	108	172.6	431	688.6	23	36.7	190	303.6	14
324.3	108	172.6	431	688.6	23	36.7	190	303.6	14
54.2	53	27.6	201	104.7	11	5.7	100	52.1	14
9.3	7	13.0	12	22.2	0	0.0	14	25.9	14
0.8	15	0.8	45	2.3	3	0.2	18	0.9	14.03
2.8	11	2.4	26	5.6	3	0.6	13	2.8	14
2.8	11	2.4	26	5.6	3	0.6	13	2.8	14
2.8	11	2.4	26	5.6	3	0.6	13	2.8	14
0.1	2	0.1	4	0.2	0	0.0	1	0.1	15.05

115.7	47	90.7	104	200.6	5	9.6	50	96.4	14
5.0	6	3.0	29	14.4	2	1.0	21	10.4	13.75
2.2	6	6.5	27	29.1	0	0.0	11	11.9	14.75
2.2	6	6.5	27	29.1	0	0.0	11	11.9	14.75
5.2	6	3.9	51	33.0	1	0.6	18	11.6	14.75
5.2	6	3.9	51	33.0	1	0.6	18	11.6	14.75
5.2	6	3.9	51	33.0	1	0.6	18	11.6	14.75
0.4	3	0.3	14	1.5	2	0.2	8	0.8	14.76
0.4	3	0.3	14	1.5	2	0.2	8	0.8	14.76
0.4	3	0.3	14	1.5	2	0.2	8	0.8	14.75
2.2	6	6.5	27	29.1	0	0.0	11	11.9	14.73
2.2	6	6.5	27	29.1	0	0.0	11	11.9	14.73
2.2	6	6.5	27	29.1	0	0.0	11	11.9	14.75
2.2	6	6.5	27	29.1	0	0.0	11	11.9	14.75
2.2	6	6.5	27	29.1	0	0.0	11	11.9	14.75
5.0	6	3.0	29	14.4	2	1.0	21	10.4	14.72
0.1	2	0.1	4	0.2	0	0.0	1	0.1	14.63
1.3	13	0.7	48	2.4	4	0.2	22	1.1	9.1
1.7	4	1.0	18	4.5	0	0.0	13	3.2	11
1.7	4	1.0	18	4.5	0	0.0	13	3.2	11

1.7	4	1.0	18	4.5	0	0.0	13	3.2	11
1.7	4	1.0	18	4.5	0	0.0	13	3.2	11
0.8	3	0.5	4	0.6	0	0.0	2	0.3	11
0.8	3	0.5	4	0.6	0	0.0	2	0.3	11
0.8	3	0.5	4	0.6	0	0.0	2	0.3	11
5.0	28	5.4	55	10.6	6	1.2	32	6.1	11
5.0	28	5.4	55	10.6	6	1.2	32	6.1	11
5.0	28	5.4	55	10.6	6	1.2	32	6.1	11
5.0	28	5.4	55	10.6	6	1.2	32	6.1	11
5.0	28	5.4	55	10.6	6	1.2	32	6.1	11
5.0	28	5.4	55	10.6	6	1.2	32	6.1	11
5.0	28	5.4	55	10.6	6	1.2	32	6.1	11
5.0	28	5.4	55	10.6	6	1.2	32	6.1	11
5.0	28	5.4	55	10.6	6	1.2	32	6.1	11
5.0	28	5.4	55	10.6	6	1.2	32	6.1	11
1.3	13	0.7	48	2.4	4	0.2	22	1.1	11
1.3	13	0.7	48	2.4	4	0.2	22	1.1	11.03
5.0	28	5.4	55	10.6	6	1.2	32	6.1	11.02
5.0	28	5.4	55	10.6	6	1.2	32	6.1	11.02
5.0	28	5.4	55	10.6	6	1.2	32	6.1	11.02
5.0	28	5.4	55	10.6	6	1.2	32	6.1	11.02

5.0	28	5.4	55	10.6	6	1.2	32	6.1	11
5.0	28	5.4	55	10.6	6	1.2	32	6.1	11.02
5.0	28	5.4	55	10.6	6	1.2	32	6.1	11
5.0	28	5.4	55	10.6	6	1.2	32	6.1	11
5.0	28	5.4	55	10.6	6	1.2	32	6.1	11
0.8	3	0.5	4	0.6	0	0.0	2	0.3	11.03
0.8	3	0.5	4	0.6	0	0.0	2	0.3	11.07
0.8	3	0.5	4	0.6	0	0.0	2	0.3	11.12
1.7	4	1.0	18	4.5	0	0.0	13	3.2	11
1.7	4	1.0	18	4.5	0	0.0	13	3.2	11
1.7	4	1.0	18	4.5	0	0.0	13	3.2	11
1.7	4	1.0	18	4.5	0	0.0	13	3.2	11
2.2	9	2.8	23	7.2	4	1.3	18	5.7	11

Routing and Scheduling							
n and Frequency		Stop Pairing		ADA	Seating & Shelter		
# of bus trips per day	Avg. Weekday Bus Frequency [buses/hour]	Bidirectional? (1 = yes)	Part of a Stop Pair? (1 = yes)	Mobility Device Landing Pad (1 = yes)	Seating	Shelter (1 = yes) [area]=sqft	
Trips Per Day	Buses Per Hour	Bidirectional	Paired Stop	ADA Landing Pad	# of benches	Shelter	Shelter Area
116	7.4	1	1	1	8	1	180
43	2.9	1	1	1	3	1	272
12	0.9	0	1	1	2	1	100
12	0.9	0	1	1	4	1	60
27	1.9	0	1	1	0	0	0
27	1.7	0	1	1	0	0	0
34	2.2	1	1	1	10	1	552
34	2.1	1	1	1	2	1	52
29	1.9	1	1	1	1	1	4200
68	4.2	1	1	1	3	1	50
23	2.1	1	1	1	1	1	55
3	0.7	0	1	1	0	0	0
15	1.1	0	1	0	0	0	0
15	1.1	0	1	1	1	1	42
15	1.1	0	1	0	0	0	0
15	1.1	0	1	0	0	0	0

15	1.1	0	1	1	1	1	54
15	1.1	0	1	1	1	1	42.9
15	1.1	0	1	1	0	0	0
15	1.1	0	1	1	1	1	22.1
15	1.1	0	1	1	1	1	32
15	1.1	0	1	1	1	0	0
15	1.1	0	1	1	1	0	0
15	1.1	0	1	1	1	0	0
15	1.1	0	1	1	1	1	38.7
15	1.1	0	1	1	1	1	40.9
15	1.1	0	1	1	1	0	0
15	1.1	0	1	1	1	1	22.3
15	1.1	0	1	1	1	1	28
15	1.1	0	1	1	1	1	32
15	1.1	0	1	1	1	0	0
15	1.1	0	1	1	1	0	0
15	1.1	0	1	1	1	0	0
15	1.1	0	1	1	0	0	0
15	1.1	0	1	0	1	0	0
15	1.1	0	1	0	1	0	0

15	1.1	0	0	0	1	0	0
15	1.1	0	1	0	0	0	0
15	1.1	0	1	0	0	0	0
27	1.9	0	1	0	0	0	0
27	1.9	0	1	1	1	1	50
3	0.5	0	1	1	1	0	0
2	0.4	0	1	1	1	0	0
26	2.0	0	1	0	1	1	0
14	1.1	0	1	0	1	1	165
14	1.1	0	1	0	1	0	0
14	1.1	0	1	1	1	1	50
14	1.1	0	1	1	1	0	0
14	1.1	0	1	1	1	0	0
14	1.1	0	1	1	1	1	32
14	1.1	0	1	1	1	0	0
14	1.1	0	1	1	1	1	60
14	1.1	0	1	1	1	1	40
14	1.1	0	1	1	1	1	26.4
14	1.1	0	1	1	1	0	0
14	1.1	0	1	1	1	1	47.5

14	1.1	0	1	1	1	0	0
14	1.1	0	1	1	1	0	0
14	1.1	0	1	1	1	0	0
14	1.1	0	1	1	1	0	0
14	1.1	0	1	0	0	0	0
14	1.1	0	1	0	0	0	0
14	1.1	0	1	1	1	1	48.6
14	1.1	0	1	1	1	1	48.6
14	1.1	0	1	1	0	0	0
14	1.1	0	1	1	1	1	43.2
14	1.1	0	1	0	0	0	0
14	1.1	0	1	1	3	1	55.2
14	1.1	0	1	1	1	0	0
17	1.3	0	1	1	0	0	0
5	2.5	0	1	1	2	1	40
5	2.5	0	1	1	2	1	40.5
33	2.2	1	1	1	3	1	57.5
33	2.2	1	1	1	1	1	88
33	2.2	1	1	1	2	1	62.5
28	1.8	1	1	1	1	1	65

29	1.9	1	1	0	1	0	0
29	1.9	1	1	1	3	1	85
31	1.9	1	1	1	3	0	150
16	1.2	0	1	1	1	1	52.5
14	1.1	0	1	1	1	1	51.8
16	1.2	0	1	0	1	0	0
14	1.1	0	1	0	0	0	0
14	1.1	0	1	1	1	1	75
14	1.1	0	1	1	1	1	42.5
14	1.1	0	1	1	1	0	0
14	1.1	0	1	1	1	0	0
16	1.1	0	1	1	1	0	0
14	1.0	0	1	1	1	0	0
14	1.0	0	1	1	1	1	49
14	1.0	0	1	1	1	1	35
15	1.1	0	1	0	0	0	0
15	1.1	0	1	1	1	0	0
15	1.1	0	1	0	1	0	0
15	1.1	0	1	1	1	1	49.5
44	2.9	1	1	1	4	1	96

28	2.0	0	1	1	1	0	0
15	1.1	0	1	1	1	0	0
16	1.1	0	1	0	0	0	0
16	1.1	0	0	0	1	0	0
16	1.1	0	0	0	1	0	0
16	1.1	0	0	0	1	0	0
16	1.1	0	0	1	1	1	55
12	0.8	0	0	1	1	0	0
12	0.8	0	0	0	1	0	0
12	0.8	0	0	0	1	0	0
12	0.8	0	0	0	1	0	0
12	0.8	0	0	0	0	0	0
12	0.8	0	0	0	1	0	0
12	0.8	0	0	0	1	0	0
16	1.1	0	1	0	1	0	0
16	1.1	0	1	1	1	0	0
29	2.0	0	1	0	1	1	48
8	0.9	1	1	1	3	0	0
5	0.5	0	1	0	1	0	0
5	0.5	0	1	0	0	0	0

5	0.5	0	1	1	0	0	0
5	0.5	0	1	0	0	0	0
5	0.5	0	1	0	0	0	0
5	0.5	0	1	0	0	0	0
5	0.5	0	1	0	1	0	0
5	0.5	0	1	0	1	0	0
5	0.5	0	1	0	0	0	0
5	0.5	0	1	0	0	0	0
5	0.5	0	1	0	1	0	0
5	0.5	0	1	1	2	0	0
5	0.5	0	1	0	0	0	0
5	0.5	0	1	0	1	0	0
5	0.5	0	1	0	1	0	0
5	0.5	0	1	1	0	0	0
5	0.5	0	1	0	1	0	0
5	0.5	0	1	1	1	0	0
5	0.5	0	1	0	0	0	0
5	0.5	0	1	0	1	0	0
5	0.5	0	1	0	1	0	0
5	0.5	0	1	0	1	0	0

5	0.5	0	1	0	0	0	0
5	0.5	0	1	0	1	0	0
5	0.5	0	1	1	1	1	36
5	0.5	0	1	1	1	0	0
5	0.5	0	1	1	3	1	30
5	0.5	0	1	0	1	0	0
5	0.5	0	1	0	1	0	0
5	0.4	0	1	0	1	0	0
5	0.5	0	1	0	1	0	0
5	0.5	0	1	0	1	0	0
5	0.5	0	1	0	1	0	0
5	0.5	0	1	0	0	0	0
5	0.5	0	0	0	1	0	0

Bus Stop Amenities

Bike	Waste				Signage
Bike rack or bike storage (1 = yes)	Trash and Recycle Receptacles				% of Routes serving stop indicated that serve stop
BikeRack	Trash Can	# of Trash	Recycle	# of Recycle	% routes Indicated
1	1	1	0	0	100%
1	1	1	0	0	100%
0	1	1	1	1	100%
0	1	1	1	1	100%
0	0	0	0	0	67%
0	0	0	0	0	100%
1	1	3	0	0	100%
1	1	2	0	0	100%
1	1	1	0	0	100%
1	1	1	0	0	100%
0	1	1	0	0	100%
0	0	0	0	0	100%
0	0	0	0	0	100%
1	1	1	0	0	100%
0	0	0	0	0	100%
0	0	0	0	0	100%

0	0	0	0	0	100%
0	1	1	0	0	100%
0	0	0	0	0	100%
0	0	0	0	0	100%
0	1	1	0	0	100%
0	0	0	0	0	100%
0	0	0	0	0	100%
0	0	0	0	0	100%
0	1	1	0	0	100%
0	1	1	0	0	100%
0	0	0	0	0	100%
0	1	1	0	0	100%
0	1	1	0	0	100%
0	1	1	0	0	100%
0	0	0	0	0	100%
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0	1	1	0	0	100%

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0	1	2	1	2	100%

0	0	0	0	0	50%
0	1	1	0	0	100%
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0	1	1	0	0	100%
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1	1	1	0	0	100%
0	0	0	0	0	100%
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0	0	0	0	0	100%